Introduction: EPA Administrator Andrew Wheeler

The Trump Administration had a wildly successful 2019, fulfilling many promises made to the American people to unleash the economy and foster American innovation. With this success has come tremendous progress here at EPA toward some of our most important environmental and human health challenges. We continue to foster a commonsense regulatory environment that is resulting in cleaner land, air and water for all Americans. This report details the actions we have taken over the last year to achieve these outcomes.

Since President Trump took office, EPA has maintained a keen focus on protecting the most vulnerable among us, directing resources toward communities that have been largely overlooked by previous administrations. All Americans, regardless of their income or zip code, deserve to share in the country's progress.

The agency has continued to elevate the Superfund program as a top priority. In FY 2019, seven additional sites were added to the National Priorities List. By adding these sites, the agency is taking action to clean up some of the most contaminated sites in America, protect the health of the local communities, and return sites to safe and productive use. While seven sites were added to the NPL, 12 sites were fully deleted last year – the most sites removed from the National Priorities List in a single year since 2001. We are prioritizing sites in economically-distressed areas, known as "Opportunity Zones," that qualify for preferential tax treatment through President Trump's historic tax reform package. Most often, those who reside near these sites are low-income, minority, and disadvantaged Americans. By focusing programs and resources on these areas, we can multiply the impact of the tax incentive and attract even more economic development to these areas. Our re-energized and reinvigorated Superfund Program is a powerful example of how the agency is transforming entire communities for the better.

EPA has also made progress on what I believe are the largest and most immediate environmental and public health issues affecting the world right now: water issues. This includes access to safe drinking water, water infrastructure, and marine plastic debris.

We are delivering on President Trump's commitment to ensuring that all Americans have access to clean and safe drinking water – beginning with the most at-risk communities. In October, we announced the first major overhaul of the agency's Lead and Copper Rule since 1991. With this proposal, we are advancing the Trump Administration's Federal Action Plan to Reduce Childhood Lead Exposure and ensuring that the first miles of lead service line replacement happens in communities that are most at risk.

In February 2019, EPA released our PFAS Action Plan. This is the most comprehensive cross-agency action plan for a chemical of concern ever undertaken by the agency and commits EPA to take important steps that will improve how we research, monitor, detect and address PFAS. I also signed a memorandum calling for the agency to prioritize new federal research that will help identify potential impacts of PFAS to farms, ranches and rural communities. In less than one year's time, we made significant progress toward many of our goals, including: the addition of PFAS chemicals to the Toxics Release Inventory; announcing the availability of $4.8 million in funding to expand research on managing PFAS in rural America and the agricultural sector; sending our regulatory determination for certain PFAS chemicals to the White House; and finalizing recommendations for cleaning up groundwater contaminated with PFOA and PFOS.

In partnership with local municipalities around the country, we are using our financing and grant programs to upgrade water infrastructure though the WIFIA loan program. During the program's three years of existence, under President Trump, EPA has delivered 14 loans totaling over $3.5 billion dollars in credit assistance. Combined with other funding sources, these projects will help finance over $8 billion dollars for water infrastructure projects and create over 15,000 jobs. In 2019, EPA invited 38 new projects in 18 states to apply for WIFIA loans totaling $6 billion dollars to help finance over $12 billion dollars in water infrastructure investments and create up to 200,000 jobs.

EPA is also reinvigorating our role as a leader in recycling across America, hosting our second annual Recycling Summit in Washington, D.C. The event brought together government and industry leaders and featured the first-ever Innovation Fair showcasing innovative solutions to modern recycling challenges. Recycling has many obvious benefits for the environment. One of the less obvious benefits of a strong recycling program globally is the reduction in marine litter, which is a priority for 2020 and beyond.
If all of this weren't enough, we continue to deliver on President Trump's regulatory reform agenda. Through diligent work, EPA has exceeded the deregulatory goals of President Trump's two-for-one executive order. Under the Trump Administration, EPA has finalized 49 deregulatory actions, saving Americans more than $5 billion dollars in regulatory costs, and we have an additional 47 actions in development projected to save billions more. We have delivered on all three major rulemakings that were proposed in 2018: the Affordable Clean Energy rule, the Safer Affordable Fuel Efficient Vehicles rule, and our new waters of the U.S. definition. Together, these actions give states and the regulated community the certainty they need to plan investments in facility upgrades and new technologies that will improve both the economy and the environment.

This year, we celebrate 50 years of environmental progress at EPA. I am honored to be part of this legacy and especially proud of the progress we made in 2019. EPA's smart, dedicated staff pushed forward to complete many significant goals and has committed to many more in the year ahead. As we continue in 2020, I know we will continue to hit critical milestones in our mission to protect human health and the environment for all Americans.

Regulatory Reform

EPA has made tremendous progress reducing unnecessary regulatory burdens. **Under President Trump, EPA has finalized 49 deregulatory actions, saving Americans more than $5 billion in regulatory costs.** In 2019 alone, EPA finalized 16 deregulatory actions, saving Americans more than $1.5 billion in regulatory costs. That is four times the number of significant regulatory actions EPA finalized in the same time span. An additional 47 deregulatory actions are under development.

As part of the agency's regulatory reform efforts, in 2019, the Office of Policy's National Center for Environmental Economics developed a new economic model to improve our benefit-cost analyses. This model will allow the Agency to conduct more comprehensive and informative analyses of the benefits and costs of EPA's regulations by tracing out how regulatory impacts ripple throughout the economy.

In October 2019, the President signed Executive Order 13891, Promoting the Rule of Law Through Improved Agency Guidance Documents. In response, we are embarking on the next phase of regulatory reforms focused on guidance. EPA's Office of Policy initiated the internal review of all guidance documents and launched a rulemaking process on how PEA will develop guidance in the future.

Air: Improving Air Quality

Air Trends
In the latest annual report on air quality, tracking our nation's progress in improving air quality since the passage of the Clean Air Act, emissions of key air pollutants continued to decline. "Our Nation's Air: Status and Trends Through 2018" documents the considerable improvements in air quality across America since 1970. The report shows that, between 1970 and 2018, the combined emissions of six key pollutants dropped by 74 percent, while the U.S. economy grew 275 percent.

"One of America's great but untold environmental success stories is that we have made – and continue to make – great improvements in our air quality, thanks largely to state and federal implementation of the Clean Air Act and innovation in the private sector," **said EPA Administrator Andrew Wheeler.** "Emissions of all key air pollutants dropped between 2016 and 2018, and lead and sulfur dioxide concentrations dropped by double-digit percentages during the same period. The U.S. is a global leader in clean air progress, and we've proven that we can protect the environment while growing our economy."

From 2016 to 2018, emissions of key air pollutants continued to decline:

- Nitrogen Oxides (NOx) ↓ 8.7 percent
- Particulate Matter 2.5 (PM 2.5) ↓ 1.9 percent
- Particulate Matter 10 (Including lead) (PM 10) ↓ 1.2 percent
- Sulfur Dioxide (SO2) ↓ 7.8 percent
- Carbon monoxide (CO) ↓ 7.2 percent
- Volatile Organic Compounds (VOC) ↓ 3.3 percent

In addition, average concentrations of harmful air pollutants decreased considerably across our nation between 1990 and 2018:

- Ground-level ozone (8-hour) ↓ 21 percent
- Fine Particulate Matter (annual) ↓ 39 percent (from 2000)
- Coarse Particulate Matter (24-hour) ↓ 26 percent
- Sulfur dioxide (1-hour) ↓ 89 percent
- Nitrogen dioxide (annual) ↓ 57 percent
- Lead (3-month average) ↓82 percent (from 2010); and
- Carbon monoxide (8-hour) ↓ 74 percent

Affordable Clean Energy Rule
In June, EPA finalized the Affordable Clean Energy (ACE) rule – replacing the prior administration's overreaching Clean Power Plan (CPP) with a rule that restores the rule of law and empowers states to continue to reduce emissions while providing affordable and reliable energy for all Americans. EPA projects that ACE will result in annual net benefits of $120 million to $730 million. With ACE, along with additional expected emissions reductions based on long-term industry trends, we expect to see CO2 emissions from the electric sector fall by as much as 35 percent below 2005 levels in 2030.

ACE will reduce emissions of CO2, mercury, as well as precursors for pollutants like fine particulate matter and ground-level ozone:

- In 2030, the ACE rule is projected to:
    - Reduce CO2 emissions by 11 million short tons
    - Reduce SO2 emissions by 5,700 tons
    - Reduce NOx emissions by 7,100 tons
    - Reduce PM2.5 emissions by 400 tons

- Reduce mercury emissions by 59 pounds

E15

Before the start of the summer driving season, EPA delivered on President Trump's promise to allow year-round sale of E15 gasoline. The final action removed the key regulatory barrier to using gasoline blended with up to 15% ethanol during the summer driving season. In addition, the final rule contained regulatory changes to reform certain elements of the RIN compliance system of the Renewable Fuel Standard program to increase transparency and deter price manipulation in the RIN market.

"Following President Trump's directive, today's action expands the market for biofuels and improves the RFS program by increasing transparency and reducing price manipulation," **said EPA Administrator Andrew Wheeler.** "As President Trump promised, EPA is approving the year-round sale of E15 in time for summer driving season, giving drivers more choices at the pump."

SAFE

In concert with the U.S. Department of Transportation (DOT), EPA delivered on President Trump's promise that his Administration would address and correct the current fuel economy and greenhouse gas emissions standards. In September, DOT's National Highway Traffic Safety Administration (NHTSA) and EPA took an initial step towards finalizing the proposed Safer, Affordable, Fuel-Efficient (SAFE) Vehicles Rule by issuing a final action entitled the "One National Program Rule," which will enable the federal government to provide nationwide uniform fuel economy and greenhouse gas emission standards for automobiles and light duty trucks.

A top priority for President Trump, when finalized, the proposed SAFE Vehicles Rule standards would establish attainable fuel economy and GHG vehicle emissions standards that will help ensure that more Americans have access to safer, more affordable, and cleaner vehicles that meet their families' needs. The SAFE rule's standards are projected to save the nation billions of dollars and strengthen the U.S. domestic manufacturing base by adding millions of new car sales. Most importantly, because newer cars are safer than ever before, the new standards are projected to save thousands of lives and prevent tens of thousands of Americans from being hospitalized by car crashes.

"Today's action meets President Trump's commitment to establish uniform fuel economy standards for vehicles across the United States, ensuring that no State has the authority to opt out of the Nation's rules, and no State has the right to impose its policies on the rest of the country," **said Secretary of Transportation Elaine L. Chao.**

"Today, we are delivering on a critical element of President Trump's commitment to address and fix the current fuel economy and greenhouse gas emissions standards," **said EPA Administrator Andrew Wheeler**. "One national standard provides much-needed regulatory certainty for the automotive industry and sets the stage for the Trump Administration's final SAFE rule that will save lives and promote economic growth by reducing the price of new vehicles to help more Americans purchase newer, cleaner, and safer cars and trucks."

This action finalized critical parts of the SAFE Vehicles Rule that was first proposed in 2018. It brings much-needed certainty to consumers and industry by making it clear that federal law preempts state and local tailpipe greenhouse gas emissions standards as well as zero emission vehicle mandates. This action will help ensure that there will be one, and only one, set of national fuel economy and greenhouse gas emission standards for vehicles. The agencies continue to work together to finalize the

remaining portions of the SAFE Vehicles Rule, to address proposed revisions to the federal fuel economy and GHG vehicle emissions standards.

Ethylene Oxide

EPA has been taking steps to address ethylene oxide emissions after EPA's National Air Toxics Assessment, issued in 2018, found that ethylene oxide emissions may be contributing to potentially elevated cancer risk in some areas around the country. Since then, EPA has been taking a two-pronged approach to evaluate these emissions. First, the agency is reviewing existing Clean Air Act regulations for industrial facilities that emit ethylene oxide. Second, because the process for revising our regulations takes time, EPA is gathering additional information on ethylene oxide emissions and is working with state and local air agencies to determine whether more immediate emission reduction steps may be warranted. By working with our state and local partners, we seek to identify opportunities to achieve early emission reductions.

In December, EPA took two important steps to as part of a suite of actions EPA is taking related to ethylene oxide, including reviewing and updating regulations for sources that emit ethylene oxide, and working closely with state and local agencies to better understand and address ethylene oxide emissions at facilities.

1. EPA issued an Advance Notice of Proposed Rulemaking (ANPRM) to solicit information from industry and the public on strategies for further reducing ethylene oxide emissions from commercial sterilization and fumigation operations.
2. The agency invited small businesses, governments, and not-for-profit organizations to participate as Small Entity Representatives providing advice and recommendations to a Small Business Advocacy Review Panel. This panel will focus on the agency's development of a rule that proposes to update the National Emission Standards for Hazardous Air Pollutants (NESHAP) for ethylene oxide emissions from commercial sterilization and fumigation operations.

EPA also continued this progress with the announcement of proposed amendments to the Miscellaneous Organic Chemical Manufacturing NESHAP, known as MON, to reduce hazardous air pollutants, including ethylene oxide. The proposed MON amendments are expected to reduce emissions of hazardous air pollutants from the source category by 116 tons per year, which includes a 93 percent reduction in ethylene oxide emissions from covered facilities.

To further explain the uncertainties in the estimated cancer risks from ethylene oxide, EPA is posted the *Memorandum: Sensitivity of ethylene oxide risk estimates to dose-response model selection*, which explores the various dose-response models evaluated in the ethylene oxide carcinogenicity assessment. This information provides important context for interpreting the risk results from the Residual Risk Assessment developed in support of this proposal.

Providing Affordable, Reliable Energy to Remote Alaskan Communities

In October, EPA issued a final rule to revise the New Source Performance Standards (NSPS) for Stationary Compression Ignition (CI) Internal Combustion Engines. Amending the standards will increase energy affordability and reliability in remote Alaska. It is also expected to improve air quality by reducing particulate matter (PM) by approximately 80%.

"Having operated utilities in rural Alaska for over 25 years, I know firsthand that power reliability challenges are significant even without more stringent regulations. Today's commonsense approach will allow utilities to provide power more reliably while ensuring older units can be replaced with newer

more efficient diesel engines. This is a success story for rural communities operating off the grid," **said Regional Administrator Chris Hladick**.

"When I'm back home in Alaska, I have a firsthand look at how the EPA can impact our state, from restoring contaminated sites, to ensuring clean drinking water, and now helping communities have greater access to more affordable, dependable energy. I appreciate Senator Sullivan and Congressman Young for their leadership on this issue and the EPA for recognizing that a one-size-fits-all method isn't workable for our state. These new regulations will make much-needed progress towards enabling Alaskans to lower the costs of their energy bills," **said Senator Lisa Murkowski (R-AK).** "This is significant, long-awaited news for the remote communities and villages in Alaska that rely on these generators to keep their homes warm and the lights on."

"I want to thank the Trump administration and EPA Administrator Wheeler for working with us, not against us, to ensure Alaskans have access to the energy that they need," **said Senator Dan Sullivan (R-AK).** "This implements my remote generator bill that was signed into law last month to allow Alaskans to power their homes reliably without having to incur crippling costs caused by unnecessarily burdensome federal regulations. I hope we can continue to work with EPA to provide regionally appropriate requirements and reliable, affordable energy for Alaskans living in remote communities."

"Today's announcement by the EPA is a great victory for our remote Alaskan communities," **said Congressman Don Young (AK-AL).** "Many Alaskans depend on diesel generators to heat their homes, run their appliances, and keep their lights on, and Washington D.C. shouldn't be getting in the way of their everyday lives. Quite frankly, new generators are very costly, and families shouldn't be burdened by an arbitrary decision made four thousand miles away. I thank Administrator Wheeler for his hard work in issuing this final rule."

Active Forest Management

EPA issued a new guidance that will help state, local and tribal air agencies and key federal partners show that certain air quality impacts from prescribed fire on wildlands should be excluded from some regulatory uses. The guidance, E*xceptional Events Guidance: Prescribed Fire on Wildland that May Influence Ozone and Particulate Matter Concentrations* streamlined the demonstration development and review process.

Consistent with President Donald Trump's December 2018 Executive Order on Promoting Active Management of America's Forests, Rangelands, and other Federal Lands to Improve Conditions and Reduce Wildfire Risk, EPA supports actively managing these lands through partnerships with states, tribes, communities, non-profit organizations, and the private sector.

Here's what people had to say:

U.S. Representative Greg Walden (OR-2), ranking member of the House Committee on Energy and Commerce: "The EPA's new guidelines are small steps in the right direction for forest management and reducing the risk of catastrophic wildfire. I'm encouraged to see that the discussions I held in Medford last year with local leaders, citizens, and the EPA's Region 10 administrator about the impact of wildfire and the challenges we face in managing our forests were taken into consideration by the EPA. These guidelines will allow for more flexibility for land managers to use prescribed fires when necessary. We know prescribed fire is one tool in the toolbox for improving forest health and reducing the risk of larger, more dangerous wildfires that pour smoke into our communities. For it to be effective, however,

it needs to follow sensible thinning and harvest projects, which is why I've included tools in my bill, the Resilient Federal Forests Act, to help forest managers expedite those projects as well. There is still lots of work to be done when it comes to forest management, but this is a welcomed piece of the puzzle. "Decisions on how, when, and how aggressively we fight fires matter. They matter to our forests, to our habitats, to our watersheds, and to the air quality in our communities. Let's have less of this ash, less of this ruin, and better air quality."

Utah Governor Gary Herbert: "We appreciate the EPA listening to states and recognizing that prescribed burns are an important tool in maintaining healthy forests and preventing catastrophic wildfires."

Wyoming Department of Environmental Quality's Air Quality Division: "Communication of clear expectations and establishing effective streamlined processes fosters collaboration and provides a positive benefit to Wyoming's citizens, business, and environment. The Wyoming Department of Environmental Quality's Air Quality Division appreciates EPA's continued efforts working with co-regulators and other stakeholders to clarify and streamline the exceptional event demonstration process."

Jefferson County Colorado Board of County Commissioners Chairman Libby Szabo: "The mission of the EPA is to protect human health and the environment, and that is exactly what this tool does. When devastating fires ravage our communities, it creates polluted air and contaminates our rivers with harmful debris. Giving local governments the latitude to make decisions that are best for the vitality of their communities will keep people safe and our air and water clean. Those are the things we all expect from our government."

Ventura County Supervisor and Air Pollution Control Board Member Kelly Long: "In the wake of some of the most devastating fires in history, we have been exploring all possible options to protect against and help mitigate the risk of wildfires, which cause destruction on a massive scale. Prescribed burns can be an incredibly effective tool to protect life and property against fire devastation and public officials should be given broad latitude to employ this proactive remedy. In addition, the air quality and public health impacts of smoke from wildfires can be greatly reduced by a well-managed prescribed fire program."

State Implementation Plans

Under the Trump Administration, the agency has been making a concerted effort to convert previously issued Federal Implementation Plans (FIPs) into State Implementation Plans (SIPs). Since January 1, 2017 EPA has converted 35 FIPs to SIPs. In addition, the agency has addressed 23 non-attainment areas.

Last year, EPA Acting Administrator Wheeler issued a Regional Haze Reform Roadmap, setting a path that puts states in charge and reduces state planning burdens. Following the roadmap, EPA has approved SIPs on regional haze for Kentucky and Arkansas.

April 2019: EPA Approves Revisions to Kentucky Regional Haze Plan

- EPA Administrator Wheeler approved revisions to the Kentucky Regional Haze SIP for sulfur dioxide and nitrogen oxides emissions at electric generating units within the commonwealth. Administrator Wheeler's approval removes the one-size-fits-all FIP for Kentucky regional haze dating back to 2012 and fully approves Kentucky's clean air plan for regional haze. The approval of Kentucky's Regional Haze SIP is another example of successful federal/state

collaboration as EPA supports states to enable efficient, timely and effective implementation of the Regional Haze program.

- "EPA is removing burdensome, top-down federal requirements and approving the commonwealth's own plan for clean air and visibility," **said EPA Administrator Andrew Wheeler.** "This action reflects President Trump's commitment to reduce regulatory burdens imposed on states and work cooperatively with them to achieve environmental progress."
- "EPA is pleased to announce the approval of Kentucky's regional haze plan," **said EPA Region 4 Administrator Mary S. Walker.** "This action returns the authority to implement these clean air provisions to the commonwealth."
- "The Kentucky Department for Environmental Protection (KDEP) appreciates EPA's recent approval of the Kentucky Regional Haze State Implementation Plan," **said KDEP Commissioner Anthony Hatton.** "In the last 10 years, emissions of sulfur dioxide and nitrogen oxides from Kentucky electric generating units have decreased by 78% and 40%, respectively."

September 2019: EPA Approves Changes to Arkansas' Clean-Air Plan for Regional Haze

- EPA worked closely with Arkansas for the last two years to update the state's plan and replace the federal implementation plan. Arkansas' plan includes the reduction of sulfur dioxide, oxides of nitrogen and particulate matter using best-available retrofit technology at seven electric-generating units.
- "States are best suited to run their clean-air programs, and Arkansas' clean-air plan gives our state partner the flexibility needed to improve its air quality," **said EPA Regional Administrator Ken McQueen.** "This plan ensures that the skies over Arkansas' scenic areas will be protected for future generations."
- "We appreciate and applaud this action by EPA. It is a remarkable day for Arkansans and all who have worked to restore state control," **said Arkansas Department of Energy and Environment Secretary Becky W. Keogh**. "Arkansas is well positioned with this approved plan to achieve and surpass the air-quality goals set in federal law, while realizing over $2 billion of savings to ratepayers."

Continued NSR Reform

Throughout 2019, the agency continued to make progress in modernizing and streamlining the New Source Review permitting program.

"NSR reforms are a key component of President Trump's agenda to revitalize American manufacturing and grow our economy while continuing to protect and improve the environment," **said EPA Administrator Andrew Wheeler.** "NSR regularly discouraged companies from investing in and deploying the cleanest and most efficient technologies. Through the Trump Administration's efforts, EPA is providing clarity to permitting requirements, improving the overall process, and incentivizing investments in the latest energy technologies."

"For too long, New Source Review permitting requirements stifled job creation, hampered innovation and slowed the ability to modernize critical energy infrastructure. Worse, in previous administrations, the permits were weaponized, so liberal activists could delay key projects," **said U.S. Senator Jim Inhofe (OK).** "New Source Review hasn't been updated in over four decades—making it hard to integrate new technologies into our energy infrastructure. I've worked for years to modernize the review process, and applaud today's action by President Trump and Administrator Wheeler to streamline the NSR permitting process."

"One of my consistent frustrations with New Source Review is what seems to be a perverse incentive away from innovation. Thank you to Administrator Wheeler and the Trump Administration for recognizing this and finalizing these positive reforms," **said U.S. Senator Kevin Cramer (ND).** "The EPA's actions provide certainty while restoring the proper scope of the Clean Air Act."

"I applaud the EPA for taking further steps to reform the New Source Review permitting program. NSR's burdensome process can impede upgrades that would actually increase efficiency and improve air quality. The EPA is moving toward a better NSR program that streamlines the process without sacrificing environmental protections," **said U.S. Representative Morgan Griffith (VA-09).**

"I applaud Administrator Wheeler for implementing a strong regulatory reform agenda at the EPA. Today's actions are a solid first step in the right direction to reform the NSR permitting program. I look forward to continue working with the Trump Administration to further reform NSR and allow America's industry to make their units more reliable and efficient, while maintaining strong environmental standards," **said U.S. Representative Andy Biggs (AZ-05).**

"President Donald Trump continues to deliver on his promise to cut burdensome regulations that strangle American manufacturing and energy development. These improvements to the New Source Review (NSR) permitting requirements will protect our air quality, while incentivizing businesses to grow and expand. I look forward to continuing to work with President Trump and Administrator Wheeler to cut needless regulations and create American jobs," **said U.S. Representative Alex X. Mooney (WV-02).**

American Wood Council President and CEO Robert Glowinski: "The ambient air final guidance has adopted an approach that will focus on likely exposure scenarios rather than evaluating unrealistic scenarios, as was done in the past. For example, the wood products industry has previously had to evaluate potential impacts anywhere a person could theoretically access, including if a person gained access to a manufacturing site by illegal trespass."

"Our industry appreciates the adoption of realistic assumptions and scenarios in this final guidance." **American Forest & Paper Association CEO Heidi Brock:** "Paper and wood products manufacturers applaud EPA's action that recognizes its ambient air policy must fit modern times and monitoring technology. This common-sense approach will allow the EPA to embrace realistic exposure scenarios to estimate the air quality impacts of projects aimed at modernizing U.S. manufacturing plants. Moreover, the new policy fulfills the twin purposes of the Clean Air Act to enhance the quality of our air and promote the productive capacity of the nation. As one of the largest manufacturing sectors in the nation, we have invested billions of dollars on environmental stewardship with significant air quality improvements. Our industry welcomes regulatory policy that supports its ability to apply sustainable business practices to help grow the economy and create American manufacturing jobs."

"This Administration is clearing the path for manufacturers to invest in more energy efficient technologies that conserve energy, reduce emissions, and keep U.S. manufacturers competitive," **said Portland Cement Association President and CEO Mike Ireland.** "For energy-intensive industries like cement, strategic investment in energy efficiency and emissions reduction are key components of any long-term climate and sustainability strategy, and EPA's New Source Review reforms announced today help unlock new opportunities for sustainable operation."

American Petroleum Institute Sr. Director of Regulatory & Scientific Affairs Howard Feldman: "API supports EPA's efforts to improve the New Source Review program, which are important for businesses and industries. Balanced, effective NSR regulations allow the oil and natural gas industry to invest in new facilities and energy infrastructure in ways that improve environmental performance."

In August 2019, EPA proposed a rule to clarify the process for evaluating whether a NSR preconstruction permit is needed when an existing major-emitting facility plans to make changes or expand. This action would reduce uncertainty and streamline regulatory obligations.

In late 2019, EPA issued final guidance, identifying the sort of measures which EPA may take account of in determining whether a source owner or operator has precluded the general public from having access to its property. The guidance updates EPA's policy to recognize that a variety of measures may be considered effective in keeping the public off a source owner/operator's property.

In addition, EPA issued a final guidance that revises the agency's interpretation of when multiple air pollution-emitting activities are located on sufficiently "adjacent" properties to one another that they should be considered a single source for the purposes of permitting. This interpretation should help clarify and streamline the permitting process.

EPA issued a proposal to address minor errors that have accumulated over time in four NSR regulations. While these minor errors, such as outdated cross references and typographical errors, have not materially impeded the effective operation of the NSR program, EPA believes that it is important to remove such errors from the regulations in order to provide regulatory certainty and clarity. The proposed corrections are all considered to be non-substantive and are intended to provide clarity and precision to the NSR regulations without altering any NSR policy or changing the NSR program as a whole.

EPA is also proposing to remove from the NSR regulations various provisions, such as certain "grandfathering" provisions, that, with the passage of time, no longer serve any practical function or purpose.

Methane

As a result of EPA's review of the 2016 New Source Performance Standards (NSPS) for the oil and natural gas industry, which was conducted in response to President Trump's Executive Order 13783 - Promoting Energy Independence and Economic Growth, the agency put forth a proposal that would remove regulatory duplication and save $17 – 19 million compliance costs each year – while maintaining health and environmental regulations on oil and gas sources that the agency considers appropriate.

"EPA's proposal delivers on President Trump's executive order and removes unnecessary and duplicative regulatory burdens from the oil and gas industry," **said EPA Administrator Andrew Wheeler.** "The Trump Administration recognizes that methane is valuable, and the industry has an incentive to minimize leaks and maximize its use. Since 1990, natural gas production in the United States has almost doubled while methane emissions across the natural gas industry have fallen by nearly 15%. Our regulations should not stifle this innovation and progress."

U.S. Senator John Barrasso (WY), Senate Environment and Public Works Committee Chairman: "The Trump Administration is working to make sure regulations are justified. The state of Wyoming already regulates methane emissions from oil and gas production. There's no need for Washington to pile on. I

will work with Wyoming to evaluate the Environmental Protection Agency's new proposal. We need commonsense rules that protect our air without hurting our economy."

U.S. Senator Jim Inhofe (OK), Senate Environment and Public Works Committee member: "I applaud Administrator Wheeler for releasing the draft rule today which will replace the burdensome and unnecessary methane rule crafted by the Obama Administration. As I said when it was first proposed, the old methane rule had no environmental benefit and created needless costs while hindering economic growth. Methane emissions have continued to decrease by voluntary actions initiated by industry, all while oil and gas production has skyrocketed. With this kind of progress, why would regulation be necessary? I am proud of Administrator Wheeler and the EPA, under the direction of President Trump, for continuing to rollback Obama-era regulations that were made with little concern for the law or the effect they may have on our economy."

U.S. Senator Mike Enzi (WY): "The current methane venting and flaring rules created under the Obama Administration were excessive and overly burdensome. I appreciate that the Trump Administration is continuing to review old regulations, and update them where necessary, to help ensure that we do not improperly burden our country's energy development. We in Wyoming know the benefit that oil and gas development can have on our community, and I look forward to reviewing the draft rule in full."

U.S. Senator Kevin Cramer (ND): "North Dakota is a leader in oil and natural gas production; and as I like to say, North Dakota does not need Washington imposing its mediocrity on our excellence. This proposed rule maintains health and environmental protections while eliminating duplicative regulations which increase compliance costs for producers that get passed along to consumers. I applaud Administrator Wheeler for continuing President Trump's promise to eliminate burdensome regulations placed on energy production, and I urge North Dakotans to offer their input on this proposal."

House Republican Conference Chair Liz Cheney (WY-At Large): "I applaud the Trump Administration for eliminating the unnecessary and overreaching Obama-Era Methane Rule that imperiled crucial sectors of our state's economy. When this rule was implemented by the previous Administration, it represented an existential threat to both America's energy industry - which employs thousands of workers in Wyoming - and to the affordable and reliable fossil fuels that families across the country rely on. Fortunately, President Trump has reversed this approach and instead championed the resources that our country has at its disposal. Today's amendments put forward by the EPA will allow the private sector to create more jobs and produce more energy at home. I will continue to work with the President and Administrator Wheeler to further increase domestic energy production, while reducing unnecessary and burdensome regulation."

Rep. Jodey Arrington (TX-19): "The heart of America's economic prosperity and unrivaled security is an abundant, affordable, and reliable supply of domestic energy. The energy revolution and, in particular, the innovations in technology we have seen from industry leaders here in West Texas in recent years have advanced our nation's energy security while creating a significant reduction in carbon emissions. Today's proposed rule will reduce unnecessary and burdensome regulations empowering our energy producers to continue to lead the way in our nation's energy dominance and environmental stewardship. The Obama Administration's midnight regulation on the oil and gas industry would have cost hundreds of millions of dollars and thousands of jobs for our small and independent energy producers with no real environmental impact. I applaud President Trump and the EPA for finding meaningful ways to balance the stewardship of our environment and economic growth leaving our nation safer, stronger, and cleaner for our children and grandchildren."

Rep. Paul Gosar (AZ-04), Congressional Western Caucus Chairman: "President Obama weaponized the EPA against the energy industry, creating job-killing regulations, and stifling American energy and economic growth. Duplicative and costly methane mandates from the Obama Administration still burden our energy sector and hold back America energy dominance. Thankfully, President Trump and Administrator Wheeler understand that industry and the environment can coexist."

Rep. Rob Bishop (UT-01), Congressional Western Caucus Chairman Emeritus: "For too long, the overregulation of methane has imposed undue burdens. By continuing on this unnecessary path, we fail to alleviate inflating energy prices or provide meaningful environmental gains. Removing barriers to energy production here at home, where we have the most stringent environmental standards, should be common sense. These proposals by the EPA are in line with the prudent policy of securing American energy independence and prosperity."

Rep. Ken Buck (CO-04) "I'm glad to see the EPA move forward with these critical, commonsense reforms that reduce burdensome regulations on the oil and gas industry, which in turn is a huge win for Colorado. I look forward to seeing the industry continue the good work they're doing to reduce methane emissions while maximizing its safe production and use without the heavy hand of the government forcing them to do so."

Rep. Andy Biggs (AZ-05): "Promises made, promises kept: I commend President Trump and his Administration for taking action against the EPA's disastrous methane rule. By promoting energy independence and economic growth through a sound deregulatory agenda, we will continue to see a boom in the American oil and gas sector that helps fuel millions of lives across the world."

Rep. James Comer (KY-01): "This Administration has prioritized removing barriers for competition and promoting common-sense regulations that benefit American industry. I applaud Administrator Wheeler and the EPA for rolling back this restrictive, unnecessary and costly rule that has proved detrimental to our domestic energy sector. Taking action against this harmful Obama-era rule is a major win for our energy producers."

Rep. Doug Lamborn (CO-05): "I applaud Administrator Wheeler for correcting the Obama Administration's improper regulatory overreach and for following the letter of the law. Today's proposed rule will remove duplicative and unnecessary regulations which needlessly burden the development and use of our domestic energy resources. The fact is that the oil and gas industry will always have an economic incentive to limit methane because capturing it allows companies to sell more gas. That is why methane emissions have continued to decrease while energy production has increased over the same time period. Innovation and technology improvements within the oil and gas industry and not ideologically driven government regulation has made the U.S. the world's leader in emissions reductions."

Rep. Pete Olson (TX-22): "President Trump and Administrator Wheeler continue to strike a needed balance that protects our environment without adding excessive rules and regulations on those who power our nation's energy needs. As a longtime advocate of this action who joined my colleagues to request a review of this burdensome mandate, I welcome this decision."

Rep. Markwayne Mullin (OK-02): "I applaud the Administration's decision to amend the EPA Methane Rule. I have repeatedly attempted to prohibit funding to this job-killing regulation. It is

counterproductive for the federal government to enact harmful regulations that cause inefficiencies, recklessly spend taxpayer dollars, and force hardships upon job-creating industries."

Rep. Kelly Armstrong (ND-At Large): "This is another example of the Trump Administration rolling back burdensome regulations that hindered economic and energy development while doing nothing to protect the environment. I applaud the President and the EPA for continuing their work to implement common sense regulatory reform that promotes energy development, contributes to national security, and creates jobs for hardworking Americans. This is good for the country, good for North Dakota, and will allow us to continue the energy dominance and independence that originally began right here in Bakken Shale formation."

WATER

Restoring Regulatory Certainty Through Repealing of the 2015 "Waters of the United States" (WOTUS) Definition and Proposing a Revised Definition

In September 2019, EPA and the U.S. Department of the Army announced the repeal of the 2015 Rule that impermissibly expanded the definition of "waters of the United States." The repeal action recodified the longstanding and familiar regulatory text that existed prior to the 2015 Rule. The repeal action also ended a regulatory patchwork that required implementing two competing Clean Water Act regulations and created regulatory uncertainty across the United States. Also in 2019, the agencies worked to carefully review the 620,000 comments received on the December 2018 proposed revised definition of "waters of the United States." The agency looks forward to finalizing this action in early 2020.

Providing Safe Drinking Water

Reducing Exposure to Lead in Drinking Water

Ensuring all communities have access to safe, clean drinking water is a top priority for EPA under the Trump Administration. In October, EPA announced a proposed rule that significantly improves the actions that water systems must take to reduce lead in the nation's drinking water. This proposal represents the first major overhaul of the Lead and Copper Rule in nearly three decades and marks a critical step in advancing the Trump Administration's Federal Action Plan to Reduce Childhood Lead Exposures. As part of the proposal, for the first time, community water systems would be required to take drinking water samples from the schools and child care facilities they serve.

"The Trump Administration is delivering on its commitment to ensure all Americans have access to clean drinking water by proposing the first major overhaul of the Lead and Copper Rule in over two decades," said EPA Administrator Andrew Wheeler. "By improving protocols for identifying lead, expanding sampling, and strengthening treatment requirements, our proposal would ensure that more water systems proactively take actions to prevent lead exposure, especially in schools, child care facilities, and the most at-risk communities. We are also working with the Department of Housing and Urban Development to encourage states and cities to make full use of the many funding and financing options provided by the federal government."

In conjunction with the announcement, EPA and the Department of Housing and Urban Development (HUD) have launched a new website that summarizes available federal programs that help finance or fund lead service line (LSL) replacement. The new resource also includes case studies demonstrating how cities and states have successfully leveraged federal resources to support LSL replacement projects.

"During my time as a physician, I saw firsthand the devastating impacts lead exposure can have on children," said HUD Secretary Ben Carson. "I applaud the EPA for taking action to reduce lead exposure in drinking water, particularly in our most vulnerable communities."

The agency's proposal takes a proactive and holistic approach to improving the current rule—from testing to treatment to telling the public about the levels and risks of lead in drinking water. When finalized, this proposal will:

- Require more water systems to act sooner to reduce lead levels and protect public health.
- Improve transparency and communication.
- Better protect children and the most at-risk communities.

The proposal focuses on six key areas. Under the proposal, a community water system would be required to take new actions, including, but not limited to:

1) Identifying the most impacted areas by requiring water systems to prepare and update a publicly-available inventory of lead service lines and requiring water systems to "find-and-fix" sources of lead when a sample in a home exceeds 15 parts per billion (ppb).

2) Strengthening drinking water treatment by requiring corrosion control treatment based on tap sampling results and establishing a new trigger level of 10 ppb (e.g. trigger level outlined below).

3) Replacing lead service lines by requiring water systems to replace the water system-owned portion of an LSL when a customer chooses to replace their portion of the line. Additionally, depending on their level above the trigger level, systems would be required take LSL replacement actions, as described below.

4) Increasing drinking water sampling reliability by requiring water systems to follow new, improved sampling procedures and adjust sampling sites to better target locations with higher lead levels.

5) Improving risk communication to customers by requiring water systems to notify customers within 24 hours if a sample collected in their home is above 15 ppb. Water systems will also be required to conduct regular outreach to the homeowners with LSLs.

6) Better protecting children in schools and child care facilities by requiring water systems to take drinking water samples from the schools and child care facilities served by the system.

Rebuilding America's Water Infrastructure

Water Infrastructure Finance and Innovation Act (WIFIA)

Established by the Water Infrastructure Finance and Innovation Act of 2014, EPA's WIFIA federal loan and guarantee program accelerates investment in the nation's water infrastructure by providing long-term, low-cost supplemental credit assistance for regionally and nationally significant projects. WIFIA credit assistance can be used for a wide-range of projects, from drinking water treatment and seawater desalination, to drought mitigation and water recycling.

Since its inception in 2017, EPA has invited projects from 27 states and the District of Columbia to apply for a WIFIA loan. The agency has issued 14 WIFIA loans to date, ranging from $21 million to $699 million. Collectively, these closed WIFIA loans totaled more than $3.5 billion in credit assistance to help finance

more than $8 billion for water infrastructure projects while creating more than 15,000 jobs. Because the WIFIA program offers loans with low interest rates, these 14 WIFIA loans are anticipated to save borrowers up to $1.15 billion compared to typical bond financing.

In October, EPA closed a $436 million WIFIA loan – the largest initial disbursement under WIFIA to date – to the Indiana Finance Authority (IFA). With EPA's WIFIA loan, IFA will be able to lend to an additional 23 drinking water and wastewater infrastructure projects, including 10 projects located in rural communities, delivering clean water and protecting public health across the state of Indiana. Drinking water projects will include efforts to improve water treatment plants, storage tanks, distribution system components, wells and pump stations as well as to construct resiliency features and implement water conservation measures. Wastewater projects will include efforts to improve and increase capacity of treatment plants and construction of tunnels to capture combined sewer overflows. As a result, Indiana residents will benefit from improved drinking water and having fewer pollutants entering their waterways.

Combining state resources, annual federal capitalization grant dollars and its WIFIA loan, Indiana's State Revolving Fund (SRF) will be able to lend nearly $900 million to support water infrastructure projects throughout the state. EPA's WIFIA program will finance nearly half of that figure – up to $436 million. The WIFIA loan will save IFA an estimated $20 million compared to typical bond financing. Project construction and operation are expected to create 3,034 jobs. This loan marks the first time EPA has provided WIFIA financing directly to a SRF program.

"By using its State Revolving Fund assets to leverage a WIFIA loan, Indiana's innovative financing approach will allow it to lend nearly $900 million to 23 projects across the state, including 10 in rural communities. These projects will improve water quality and protect the health of millions of Hoosiers while also creating well-paying jobs," said EPA Administrator Andrew Wheeler.

"When we say infrastructure, we often think of our roads, but Indiana has more than 46,000 miles of water infrastructure," said Eric Holcomb, Governor of Indiana. "Delivering clean water and protecting public health are top priorities, and I am grateful that our partnership with the EPA will help empower communities across Indiana to take our water systems to the Next Level."

"In Indiana, we aren't afraid to make history. We are honored to be the first state to receive WIFIA financing directly to our State Revolving Fund program," said Jim McGoff, Chief Operating Officer for IFA.

"As a life-long conservationist, this WIFIA loan from President Trump's EPA will improve water quality for millions of Hoosiers across the state," said U.S. Senator Mike Braun. "Hoosiers should be proud that President Trump's EPA is restoring regulatory certainty, while creating good-paying jobs and, most importantly, securing access to clean, drinkable water for generations to come."

"I am pleased to see that Indiana is receiving a $436 million WIFIA loan to help with critical water infrastructure needs. This investment will help Hoosiers across the state, including those in rural communities, receive important funding to strengthen and improve their water infrastructure," said Dr. Larry Bucshon (Congressman, IN-08). "As a physician, I understand the importance clean and reliable water infrastructure plays in the health of our citizens and the vitality of our agriculture."

State Revolving Funds

The Clean Water and Drinking Water State Revolving Funds play an integral role in President Trump's efforts to improve and upgrade our nation's water infrastructure and ensure all Americans have access to clean and safe water. In 2019, EPA made a $2.6 billion contribution to the State Revolving Funds, enabling more communities to make the investments needed to ensure Americans have safe water for drinking and recreation. These funds can also be combined with EPA's WIFIA loans to create a powerful, innovative financing solution for major infrastructure projects nationwide.

Modernizing the Clean Water Act (CWA) Permitting Process: Sections 401 and 404
Working cooperatively with state and tribal co-regulators, the regulated community, and other stakeholders, EPA took multiple actions in 2019 toward streamlining and improving the efficiency of CWA Section 401 certification processes and Section 404 permitting, including:

Issuing guidance and proposed a rule to provide greater clarity and regulatory certainty regarding the Section 401 water quality certification process, as directed by President Trump's Executive Order 13868, "Promoting Energy Infrastructure and Economic Growth." Prior to the Trump Administration's efforts, the rules governing Section 401 authority had not been updated in nearly 50 years and evolving case law and outdated agency guidance caused some confusion and resulted in delays in certain infrastructure projects with potentially significant national benefits. EPA met its Executive Order 13868 obligations by issuing guidance in June to help clarify existing water quality certification regulations for federal agencies, states, and authorized tribes and by proposing a rule in August that seeks to modernize the agency's existing regulations and implement Section 401 to provide greater clarity and regulatory certainty for the water quality certification process.

Initiating a rulemaking to modernize the Section 404(g) regulations and to foster greater interest by states and tribes to assume administration of Section 404 permitting responsibility. This includes clarifying which waters a state or tribe may assume and which would be retained by the U.S. Army Corps of Engineers (Corps). To date, only Michigan and New Jersey have assumed administration of the Section 404 program; the Corps retains permitting authority for the rest of the country;
Initiating a rulemaking with the Corps to enhance the efficiency of the mitigation bank and in-lieu fee program approval time while also promoting conservation and wetland mitigation projects.

Reducing Excess Nutrients in the Nation's Waters
Under the Trump Administration, EPA is focusing its attention on reducing excess nutrients in the nation's waters through an all-of-the-above approach, which includes enhanced federal and state coordination and stakeholder engagement, and promoting market-based and other collaborative approaches to water quality improvements.

Water Quality Trading
In February, the agency issued a new water quality trading policy memorandum identifying six market-based principles the agency supports that are intended to promote nutrient reductions and water quality improvements at a lower cost using market-based mechanisms. This policy change works to improve upon the agency's 2003 water quality trading memorandum, which despite its intent did not facilitate widespread adoption of water quality trading. In September, EPA took another step in this process by seeking public comment on one of the six market-based principles identified in the water quality trading policy memo, asking for public input on approaches to clarify and provide flexibility on the use of credits in water quality trading.

Mississippi River/Gulf of Mexico Hypoxia Task Force (Hypoxia Task Force)

To stimulate greater collaboration between stakeholders, EPA hosted a roundtable discussion in Baton Rouge, Louisiana, in May, focused on identifying opportunities to reduce nutrient losses around the country. Following the roundtable discussion, EPA co-chaired the Hypoxia Task Force (HTF) public meeting, where federal and state members of the HTF heard updates on gulf science, new tools for tracking conservation actions, and innovative financing and market opportunities to reduce excess nutrients. In August, EPA announced that it is providing $1.2 million to the 12 state members of the HTF to help implement state plans to reduce excess nutrients.

"The Trump Administration's nutrient roundtable discussion produced a rich conversation on the challenges and opportunities that lie ahead for reducing nutrient losses in the Mississippi River Basin," said David Ross, Assistant Administrator for the U.S. Environmental Protection Agency's Office of Water. "EPA looks forward to convening more of these roundtable discussions in the future so that we can better focus federal resources to address this environmental challenge and deliver more effective results for the American people."

"The U.S. Department of the Interior and the U.S. Geological Survey play an important role in the federal family partnership with the Mississippi River," said Tim Petty, Assistant Secretary for Water and Science for the U.S. Department of the Interior.

"USGS's long history of nutrient monitoring and modeling provides an essential foundation for delivering new science and tools for federal, state, tribal and local decision makers and communities," said Jim Reilly, Director of the U.S. Geological Survey.

Other Actions
In February EPA signed a Memorandum of Understanding with the Water Research Foundation to develop affordable technologies to recycle nutrients from manure. In May, EPA issued new recommendations for water quality criteria and swimming advisory values for two cyanotoxins. EPA also published infographics for state and stakeholder use to help inform the public of what harmful algal blooms may look like and how to prevent exposure to humans and pets. In July, EPA released the Cyanobacteria Assessment Network (CyAN) mobile app, which uses satellite data to alert users that a harmful algal bloom could be forming, based on specific changes in the color of the water in more than 2,000 of the largest lakes and reservoirs across the United States. In August, EPA announced awarding more than $7.5 million in Farmer to Farmer [HYPERLINK "https://www.epa.gov/newsreleases/epa-announces-more-75-million-water-quality-cooperative-agreements-through-gulf-mexico" \h]to fund projects that improve water quality, habitat, and environmental education in the Gulf of Mexico watershed. These grants promote innovative, market-based solutions for monitoring and improving water quality while also maintaining a vital agricultural economy.

Achieving Greater Pollution Reductions at a Lower Cost
In November, EPA proposed revisions to its Steam Electric Power Plant Effluent Guidelines Rule issued in 2015, which was subject to legal challenge and for which the agency received multiple petitions for administrative reconsideration. EPA's proposal would achieve greater pollution reductions than the 2015 rule, at a lower cost. By leveraging newer and less costly pollution control technologies and taking a flexible, phased-in implementation approach, EPA's proposal is estimated to save more than $175 million annually in pre-tax compliance costs while reducing the amount of pollutants discharged to our nation's waters by approximately 105 million pounds per year over the 2015 rule.

Promoting Greater Water Reuse and Recycling Nationwide

With 80 percent of states anticipating some freshwater shortages in the next decade, all levels of government have a responsibility to ensure that Americans have access to reliable sources of clean and safe water. Water reuse has become a rapidly expanding means of supporting the nation's communities and economy by bolstering safe and reliable water supplies for human consumption, agriculture, business, industry, recreation, and healthy ecosystems. EPA, under the Trump Administration, has made it a priority to promote the reuse of water for beneficial purposes instead of treating it as waste. In September, EPA released the draft National Water Reuse Action Plan for public comment. The draft National Water Reuse Action Plan represents the first initiative of this magnitude that has been coordinated across the water sector and identifies priority actions and the leadership and collaboration that is needed between governmental and nongovernmental organizations to implement these actions. When finalized in February 2020, the National Water Reuse Action Plan will include clear commitments and milestones for specific actions that will further water reuse.

Supporting America's Water Sector Workforce
In September, EPA announced its Water Workforce Initiative, a first-of-its-kind initiative by the agency to help cities and communities across the country that are facing critical staffing shortages for the operation and maintenance of essential drinking water and wastewater infrastructure. The goal of this new initiative is to provide federal leadership, collaborate with partners, and increase public awareness to bolster interest in water sector careers – a field that is charged with ensuring that all Americans have access to clean and safe water.

"Ensuring all Americans have access to clean water is a top priority of the Trump Administration, and we can't fulfill that goal without supporting the skilled workers who provide clean drinking water and safe wastewater treatment every day," said EPA Administrator Andrew Wheeler. "We are launching the Water Workforce Initiative to help local communities ensure they have enough highly trained workers to operate the water utilities of today and tomorrow."

Approximately one-third of drinking water and wastewater operators in the U.S. will be eligible to retire in the next 10 years. Due to several factors, including limited awareness of water careers, the sector often faces challenges with recruitment and retention of the skilled workers required in today's high-tech water sector. And due to the scale of this challenge and the implications for environmental and public health protections, collaboration across federal, state, tribal and local governments as well as public utilities, the private sector, water sector associations, community groups and educational institutions is essential to developing an actionable Water Workforce Initiative.

"Building a dynamic and diverse water workforce for the 21st century is absolutely vital to continuing to deliver on our sector's mission to protect public health and the environment," said Water Environment Federation President Tom Kunetz. "WEF is very grateful that EPA is collaborating with our organization and others to address critical workforce needs and believes the agency's support will help advance current initiatives and better target federal efforts to the water sector."

"EPA looks forward to capturing innovative ideas and collaborative actions through our Water Workforce Initiative so that we can take meaningful steps to ensure we have a strong water sector workforce for generations to come," said EPA Assistant Administrator for Water David Ross.

LAND
Superfund

In Fiscal Year (FY) 2019 EPA deleted all or part of 27 sites from Superfund's National Priorities List (NPL), the largest number of deletions in a single year since FY 2001. This represents the third year in a row that EPA has significantly increased the number of sites deleted from the NPL, helping communities move forward in reusing and redeveloping the land by making it clear that cleanup is complete.

The agency's FY 2019 deletions include 12 full sites and parts of 15 sites.

The 12 sites EPA completely deleted from the NPL are:

1. Buckeye Reclamation in St. Clairsville, Ohio
2. Duell & Gardner Landfill in Dalton Township, Michigan
3. Electro-Coatings, Inc in Cedar Rapids, Iowa
4. Ellenville Scrap Iron and Metal in Ellenville, New York
5. Intel Corp. (Santa Clara III) in Santa Clara, California
6. Intermountain Waste Oil Refinery in Bountiful, Utah
7. MGM Brakes in Cloverdale, California
8. Mystery Bridge Rd/U.S. Highway 20 in Evansville, Wyoming
9. Peter Cooper in Gowanda, New York
10. Strasburg Landfill in Newlin Township, Pennsylvania
11. Tennessee Products in Chattanooga, Tennessee
12. Tomah Armory in Tomah, Wisconsin

The 15 sites EPA partially deleted are:

1. Beckman Instruments (Porterville Plant) in Portville, California
2. Beloit Corp. in Rockton, Illinois
3. Cleburn Street Well in Grand Island, Nebraska
4. Escambia Wood in Pensacola, Florida
5. Libby Asbestos in Libby, Montana
6. Novak Sanitary Landfill in South Whitehall Township, Pennsylvania
7. Omaha Lead in Omaha, Nebraska
8. Robintech, Inc./National Pipe Co. in Vestal, New York
9. Shaw Avenue Dump in Charles City, Iowa
10. South Minneapolis Residential Soil Contamination in Minneapolis, Minnesota
11. South Valley in Albuquerque, New Mexico
12. South Weymouth Naval Air Station in Weymouth, Massachusetts
13. Townsend Saw Chain Co. in Pontiac, South Carolina
14. Twin Cities Army Ammunition Plant in New Brighton, Minnesota
15. Vasquez Boulevard and I-70 in Denver, Colorado

Superfund Redevelopment

EPA celebrated the 20th anniversary of the Superfund Redevelopment Initiative, launched in 1999 with the goal of returning formerly contaminated lands to long-term sustainable and productive reuse for communities across the country. In 2019, 48 sites reached Sitewide Ready for Anticipated Use status, meaning they were ready for communities to reuse sites which were formerly contaminated land. Returning Superfund sites back to productive use has resulted in dramatic changes in communities by improving the quality of life, raising property values, and providing needed services to communities.

Highlights:

- EPA recognized Minnesota Pollution Control Agency, Oklahoma Department of Environmental Quality and Oregon Department of Environmental Quality for their work ensuring long-term protection of human health while facilitating the beneficial reuse of formerly blighted properties.
- Communities affected by hazardous waste sites play an important role in working with EPA on sites in their communities. EPA convened or participated in more than 800 public meetings, conducted more than 1,000 in-person interviews with community members living near Superfund sites, and distributed more than 1,050 factsheets, mailings, postcards, ads, or newsletters that reached more than 250,000 people living near Superfund sites.
- EPA's Contract Lab Program conducted more than 73,000 analyses to support cleanup activities at 297 sites.

Superfund Task Force
In September, at the Southside Chattanooga Superfund Site, EPA Administrator Andrew Wheeler announced the completion of the Superfund Task Force and issued the Task Force's final report outlining significant accomplishments over the past two years at Superfund sites across the country.

"Thanks to the hard work of EPA career officials, the Superfund Task Force has strengthened the program in numerous ways, from accelerating cleanups to promoting redevelopment to improving community engagement," said Administrator Andrew Wheeler. "The recommendations generated by the Task Force and applied by the Superfund program have directly improved the health and economic opportunity of thousands of people living near Superfund sites. We are taking concrete steps to ensure that the work of the Task Force continues to enhance the Superfund program moving forward."

The important work of the Task Force will continue under the Superfund Program and at all sites on the National Priorities List (NPL). The agency will continue to prioritize expediting cleanups to protect people's health and the environment. Moving forward, the agency plans to:

- Improve accountability and ensure the work continues in the future by tracking and reporting on our progress with a new set of performance measures.
- Conduct a strategic and comprehensive portfolio review of every site remaining on the NPL to enable EPA to better utilize the Task Force's tools and lessons learned in advancing cleanups across the country.
- Continue to identify and implement new opportunities and approaches to improve the program's performance and effectiveness.

Highlights of the Superfund Task Force Accomplishments

Goal 1: Expediting Cleanup and Remediation: The Task Force developed several tools to expedite cleanup and remediation at sites including the Administrator's Emphasis List, a list of sites targeted for the administrator's immediate and intense attention. The agency will continue using the Emphasis List to focus on sites needing immediate and intense attention and will update the list quarterly. Substantial progress has been made at sites on this list, for example:

- New Castle, Delaware: At the Delaware Sand and Gravel Landfill Superfund Site a settlement with responsible parties was secured allowing the initiation of pre-design work and installation of two groundwater interceptor wells to protect water supply wells.

- Picher and Cardin, Oklahoma: At the Tar Creek Superfund Site the Agency brought together various parties to develop a long-term strategy to manage risks, cleanup, and economic opportunities at the site.

Goal 2: Re-Invigorating Responsible Party Cleanup and Reuse: The Task Force developed new enforcement guidance for EPA's regional offices to accelerate remedial design starts at potentially responsible party (PRP)-lead Superfund sites. Moving forward, the guidance's recommended settlement strategy will be considered by EPA regions as a matter of national practice. This guidance has accelerated work at several sites, for example:

- Calvert City, Kentucky: At the B.F. Goodrich Site EPA negotiated a settlement agreement with PRPs for the remedial design. The agreement allows the PRPs to begin designing the cleanup while negotiating a separate agreement for the remedial action phase of the cleanup.

Goal 3: Encouraging Private Investment: The Task Force recognized that EPA should support, where appropriate, innovative approaches to promote third-party investment in cleanup and reuse of contaminated properties consistent with statutory authorities. By the end of 2019, EPA plans to issue a memorandum to EPA regional offices to promote this approach where appropriate and in the interest of the Superfund Program, for example:

- Fredericktown, Missouri: At the Madison County Mines Site, EPA entered into an administrative settlement with Missouri Mining Investments, LLC to conduct removal actions at the site. This will result in the consolidation and capping of on-site mine waste and allow the approximately 1,750-acre property to be redeveloped for future mining of cobalt and other metals.

Goal 4: Promoting Redevelopment and Community Revitalization: The Task Force worked to increase the number of NPL sites that are returned to communities for redevelopment through focused management attention and improved program practices. In Fiscal Year (FY) 2018, EPA achieved the goal sitewide ready for anticipated use at 51 sites, the highest total since FY 2013. EPA will continue to post specific information about sites available for redevelopment prominently on the Superfund Redevelopment website for stakeholders, developers, and businesses seeking information, for example:

- Libby, Montana: The agency identified the Libby Asbestos Superfund Site and the Libby Groundwater Contamination Superfund site as redevelopment opportunities. In addition to a cleanup that restored neighborhoods and business areas, parts of the sites are now in reuse. The Riverfront Park now has river access, pavilions, a memorial, parking, and picnic tables.

Goal 5: Engaging Partners and Stakeholders: The Task Force initiated a number of ongoing outreach activities to engage communities near Superfund sites, for example:

- Partnership and Stakeholder Engagement Strategy: EPA developed and released a "Partnership and Stakeholder Engagement Strategy" to strengthen EPA partnerships and increase public participation and transparency at Superfund sites across the country.
- Risk Communication Strategy: The agency developed a plan to improve risk communication and community involvement practices during the long-term stewardship phase of Superfund site remediation. Lessons learned from implementing this plan will be applied across the life-cycle of the Superfund process.

Brownfields

Under the Trump Administration, EPA's Brownfield and Land Revitalization Program has provided approximately $222 million directly to communities and nonprofits, for cleanup and redevelopment, job

creation and economic development through the award of approximately 793 grants. The agency has also allocated $139.8 million to approximately 171 state and tribal entities to establish and enhance their brownfields response programs. These grants provide communities with an opportunity to transform contaminated sites into community assets that attract jobs and achieve broader economic development outcomes.

In June, EPA Administrator Andrew Wheeler, joined by the White House Executive Director for the Opportunity and Revitalization Council Scott Turner, traveled to Dauphin County, Pennsylvania, to announce that 149 communities have been selected to receive 151 grant awards totaling $64,623,553 in EPA Brownfields funding through the Multipurpose, Assessment, and Cleanup (MAC) Grant Programs. These funds will aid under-served and economically disadvantaged communities in Opportunity Zones and other parts of the country in assessing and cleaning up abandoned industrial and commercial properties. Forty percent of the communities selected for funding will receive assistance for the first time.

"These grants fulfill several of President Trump's top priorities simultaneously: helping communities in need transform contaminated sites into community assets that not only create jobs and jumpstart economic development but also improve public health and the environment," said EPA Administrator Andrew Wheeler. "We are targeting these funds to areas that need them the most. Approximately 40 percent of the selected recipients are receiving Brownfields grants for the first time, which means we are reaching areas that may previously been neglected, and 108 of the selected communities have identified sites or targeted areas that fall within Opportunity Zones."

"I am truly excited to join as EPA Administrator Andrew Wheeler announces over $64 million in Brownfield funding," said Scott Turner, Executive Director of the White House Opportunity and Revitalization Council. "The Brownfields grant program is a tremendous vehicle for bringing real revitalization and transformation to the distressed communities of America. As the Executive Director of the White House Opportunity and Revitalization Council, I am pleased that EPA continues to support the Council and the President's work in this area. In fact, of the 149 communities selected for these grants, 108 will benefit communities with Opportunity Zones. I look forward to seeing the impact that these grants will have on neighborhoods and citizens across the country."

Grants awarded by EPA's Brownfield Program provide communities across the country with an opportunity to transform contaminated sites into community assets that attract jobs and achieve broader economic development outcomes while taking advantage of existing infrastructure. For example, Brownfields grants have been shown to:

- Increase Local Tax Revenue: A study of 48 Brownfields sites found that an estimated $29 million to $97 million in additional local tax revenue was generated in a single year after cleanup. This is two to seven times more than the $12.4 million EPA contributed to the cleanup of these sites.
- Increase Residential Property Values: Another study found that property values of homes near revitalized Brownfields sites increased between 5% and 15% following cleanup.

EPA also announced $9.3 million in supplemental funding for 24 current successful Brownfields Revolving Loan Fund (RLF) grantees in June. The supplemental funds announced are going to communities including the City of Atlanta, City of Rockford, Indiana Finance Authority, City of Worcester, City of Racine, and Vermont Agency of Commerce and Community Development, that have demonstrated success in using their RLF funds to clean up and redevelop brownfield sites. The funds will be used to continue their progress in reusing vacant and abandoned properties and turning them into

community assets such as housing, recreation and open space, health facilities, social services, and commerce opportunities.

Rounding out the fiscal year, EPA announced the selection of 26 organizations to receive a total of $5.1 million in grants for environmental job training programs across the country. Funded through the agency's successful Environmental Workforce Development and Job Training Program, these grants help to create a skilled workforce in communities where EPA brownfields assessment and cleanup activities are taking place.

Of the programs selected for funding this year, 31% plan to serve residents of communities experiencing persistent poverty and nearly 70% plan to serve veterans. All 26 selected programs plan to serve communities with census tracts designated as federal Opportunity Zones – an economically-distressed community where new investments, under certain conditions, may be eligible for preferential tax treatment.

Selectees:

1. Alaska Forum Inc. (Anchorage, Alaska)
2. Auberle (McKeesport, Pennsylvania)
3. City of New Bedford (New Bedford, Massachusetts)
4. City of Pittsburg (Pittsburg, California)
5. City of Richmond (Richmond, California)
6. City of Rochester (Rochester, New York)
7. City of Springfield (Springfield, Missouri)
8. Civic Works Inc. (Baltimore, Maryland)
9. Colorado Department of Local Affairs (Denver, Colorado)
10. Corporation to Develop Communities of Tampa Inc. (Tampa, Florida)
11. Cypress Mandela Training Center Inc. (Oakland, California)
12. Earth Conservancy (Ashley, Pennsylvania)
13. El Centro (Kansas City, Kansas)
14. Full Employment Council (Kansas City, Missouri)
15. Great Lakes Community Conservation Corps. (Milwaukee, Wisconsin)
16. Hunters Point Family (San Francisco, California)
17. Lorain County Board of Commissioners (Elyria, Ohio)
18. Lost Angeles Conservations Corps (Los Angeles, California)
19. OAI Inc. (Chicago, Illinois)
20. PathStone Corporation (Rochester, New York)
21. Southern University at Shreveport (Shreveport, Louisiana)
22. St. Louis Community College (Bridgeton, Missouri)
23. The Fortune Society Inc. (Long Island City, New York)
24. Training to Work an Industry Niche (Charlotte, North Carolina.)
25. Workforce Inc. dba RecycleForce (Indianapolis, Indiana)
26. Zender Environmental Health and Research Group (Anchorage, Alaska)

2019 Brownfields Conference

In December, EPA cohosted he 2019 Brownfields National Training Conference in Los Angeles, California with the International City/County Management Association. More than 2,032 stakeholders in cleanup and redevelopment attended this year's conference to learn from each other about sustainable reuse of brownfield sites and share success stories from across the country. Participants included representatives

from communities, non-profits, real estate development, the building industry, and academic institutions, as well as local, state, tribal and federal government leaders.

"Finding ways to revitalize vacant, abandoned, contaminated or potentially contaminated properties is at the heart of EPA's cleanup programs," **said EPA Office of Land and Emergency Management Assistant Administrator Peter Wright**. "EPA is proud to have sponsored this national conference, which provided our brownfields communities and stakeholders with an unparalleled opportunity to learn how to build and improve local programs."

This conference provided a dynamic educational program of speakers, discussions, mobile workshops, films and other learning formats. Case study examples, program updates, and useful strategies were provided to help attendees meet various brownfield challenges head on. Topics covered at the event included:

- Success Stories from the Environmental Justice Communities
- Sustainability, Livability, Resiliency
- Financing Options, Real Estate, & Economic Development
- Smart Cities and Communities
- Community Engagement and Environmental Justice
- State, Tribal and Local Government Programs and Partnerships
- Liability and Enforcement
- Cleanup and Remediation Approaches
- Small Communities and Rural Places

Emergency Management

Final Rule to Add Reporting Exemption Under EPCRA for Air Emissions from Animal Waste

In June, EPA Administrator Andrew Wheeler signed a final rule amending the emergency release notification regulations under the Emergency Planning and Community Right-to-Know Act (EPCRA). The amendments clarify that reporting of air emissions from animal waste at farms is not required under EPCRA.

The final rule comes as first responders across the county have repeatedly reminded the agency that community-specific protocols are determined between local responders and animal producers well in advance of emergencies. These strong partnerships provide a platform for resolving issues when they arise without the need for a national one-size-fits-all approach.

"This final rule provides clarity and certainty to the regulated community that animal waste emissions from farms do not need to be reported under EPCRA," said EPA Administrator Andrew Wheeler. "This action eliminates an onerous reporting requirement and allows emergency responders and farmers to focus on protecting the public and feeding the nation, not routine animal waste emissions."

"The goal of emergency response officials and local emergency planning committees (LEPCs) is to prepare communities for emergency threats related to hazardous chemical releases. Such emergency threats do not include 'best guess' reporting on day-to-day emissions on farms and animal operations," said National Association of SARA Title III Program Officials (NASTTPO) President Tim Gablehouse. "The focus of LEPCs should be and is on chemical hazards that present meaningful risk of harm to community members and first responders. We look forward to working on enhanced coordination and cooperation between all community members to improve preparedness for hazardous chemical releases."

RMP Reconsideration Rule

In November, the agency released the Risk Management Program (RMP) Reconsideration final rule, which modifies and improves the existing rule to remove burdensome, costly, unnecessary amendments while maintaining appropriate protections and ensuring first responders have access to all of the necessary safety information. This rule also resolves important security concerns.

EPA's final RMP reconsideration rule maintains important public safety measures. Under this final rule, no less safety information will be available to first responders and state and federal regulators than was available under any previous version of the RMP rule. It also directly addresses the concerns of local emergency responders and other federal agencies including the U.S. Small Business Administration that were originally raised during the rulemaking of the 2017 RMP Amendments.

The revisions in this rule, based on a careful analysis of over a decade of data, are designed to drive effective emergency planning and continue to support the long-term trend of fewer significant chemical accidents – a trend that has continued since the original rule was finalized in 1996. The rule: reduces unnecessary and ineffective regulatory burdens on facilities and emergency responders (many of whom in rural areas are volunteers); harmonizes rather than conflicts with the Occupational Safety and Health Administration's (OSHA) Process Safety Management standard; and saves Americans roughly $88 million a year.

"The Obama Administration not only subjected facilities to even more burdensome, duplicative, and needless regulation; but it also made all of us more vulnerable to security threats. Instead of making facilities safer and more secure, the Obama Administration seemed intent on making unnecessary and redundant regulation enacted only for regulation's sake. Fortunately, President Trump has taken action to protect both public safety and jobs. President Trump's revisions account for better coordination and communication which will ultimately prevent accidents, save lives, and protect property," said Louisiana Attorney General Jeff Landry.

"It is encouraging to see the agency has agreed to reconsider a rule that would impose repetitive requirements on local and state officials as well as raise serious public safety concerns," said Arkansas Attorney General Leslie Rutledge.

"I am grateful to the EPA for making the changes necessary to get the Risk Management Plan rule back in line with public safety and a proper balance of power between state and federal authorities. These revisions to the Obama-administrations' last-minute rule will make Texans safer, ease the burden on state and local governments, and restore some common sense to the regulatory process. By listening to the state and local experts who have pointed out the national security and public safety risks of publishing sensitive information about refineries, chemical plants, manufacturing facilities, and agricultural operations, the Trump Administration has shown its dedication to putting the rule of law and the safety of Americans first," sad Texas Attorney General Ken Paxton.

"Today's action in updating the RMP Rule is critical to protecting the public and striking a balance to require transparency while avoiding providing a roadmap for those who would occasion harm to the public. The State of Oklahoma commends Administrator Wheeler for listening to emergency responders and security experts to create the balance required to best protect the public while safeguarding emergency responders and national security," said Oklahoma Secretary of Energy and Environment Ken Wagner.

"(These changes) will help the Calcasieu Parish LEPC coordinate with our stationary facilities in our Parish. We discussed the new rules at our last LEPC meeting this past Tuesday, November 19. RMP compliance is one of our goals for next year. The change will help us to collect emergency contacts, conduct drills, review plans and incidents. We presently have an incident review process for facilities that is voluntary. The changes would encourage facilities to participate in our review process," said Calcasieu Parish Local Emergency Planning Committee Chairman Mason G. Lindsay.

Emergency Response & Natural Disasters

EPA responded to major emergencies that included the Camp and Woolsey Wildfires in California, Super Typhoon Yutu, preparations for Hurricane Dorian, and a 46-car train derailment releasing 13,000 gallons of sulfuric acid in the Canadian border tunnel.

1. **Historic Four-State Flood Response**: In March 2019, There was catastrophic and historic flooding across significant portions of Nebraska, Iowa, Kansas, and Missouri. In response to this major disaster, EPA Region 7 activated in all four states for the first time since the 1993 floods. In total, Region 7 received from FEMA a total of eleven Mission Assignments over the course of four months to identify and recover orphan containers and hazardous materials that settled on the interstates, highways, levees, and wildlife management areas. This flood response work resulted in collection of more than 5,000 containers from over 1,100 river miles and 1,000 acres of wildlife management areas. Over 75 percent of the collected materials were diverted from landfills by reusing or recycling the materials or returning them to owners. The response team also completed 45 Superfund National Priority List site assessments, 75 Facility Response Plan facility assessments, 76 RCRA Corrective Action facility assessments, and 617 Risk Management Plan facility assessments in potentially flood impacted areas. In addition, at the request of the Nebraska Department Health & Human Services, Region 7 deployed its mobile laboratory to test for *E.* coli in private wells that had been inundated by flood waters. This highly effective disaster response is especially notable considering that Region 7 was active in six separate disaster declarations in 2019 that resulted in over 100 separate deployments of On-Scene Coordinators and Regional Response Support Corps personnel.
2. **Continued Hurricane Irma and Maria Recovery Assistance:** EPA Regional Administrator Pete Lopez visited Puerto Rico as part of EPA's efforts to advance recovery from Hurricanes Irma and Maria, as well as tackle ongoing environmental challenges in the Caribbean. During this trip Regional Administrator Lopez met with commonwealth and local partners to strengthen the partnerships formed during the emergency response and continue the close coordination on recovery efforts, including solid waste management, upgrading drinking water systems and addressing wastewater infrastructure issues. As part of its continuing efforts to help the Caribbean recover from the long-term impacts from Hurricanes Irma and Maria, EPA awarded a $6.2 million to the Puerto Rico Department of Natural and Environmental Resources (DNER) as the first installment of a $40 million grant for hazardous and solid waste management financial assistance.
3. **Superbowl LII Support:** During Superbowl LIII, Region 4 co-deployed EPA air monitoring equipment with local government agencies and the U.S. Department of Homeland Security at the Mercedes Benz Stadium and associated event locations in Atlanta, Georgia.
4. **Tank Fire Partnership Response:** In response to a tank fire in March, the Environmental Protection Agency, Texas Commission on Environmental Quality (TCEQ), and local agencies joined the Intercontinental Terminals Company in a Unified Command. Multiple agencies and groups supported the response effort. EPA's Airborne Spectral Photometric Environmental Collection Technology mobile asset provided support with daily chemical surveys and high-resolution aerial photography of the facility and oil collection efforts on Houston Bay. The EPA

Trace Atmosphere Gas Analyzer, a self-contained mobile laboratory capable of real-time sampling of outdoor air or emissions, also provided continuous air monitoring of organic compounds.

In June, EPA and FEMA announced an MOU that streamlines coordination between FEMA and the EPA-funded State Revolving Fund (SRF) programs so that funding to restore vital water infrastructure can be provided as quickly as possible in times of disaster. In disaster situations where cash reserves are stretched thin, the EPA-FEMA MOU provides a tribe or local government access to a no-interest or low-interest loan from its SRF to help pay for the immediate restoration of vital drinking water and wastewater infrastructure.

EPA published an updated Planning for Natural Disaster Debris Guidance (PNDD) to assist state, tribal and local governments in strengthening planning for future incidents and in helping communities better prepare for the waste management challenges that exist immediately after these disasters. The PNDD included guidance issued separately by EPA that included: Pre-incident All-hazards Waste Management Plan Guidelines, the Four-step Waste Management Planning Process and the All-hazards Waste Management Decision Diagram. Additional tools developed for pre-incident planning for topics such as natural disaster events included a downloadable homeland security incident planning brochure and poster.

Hazardous Waste

CCR

This past year, EPA issued two proposals to revise specific provisions of the 2015 final coal combustion residuals (CCR) rule. CCR is commonly known as coal ash, fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from coal-fired electricity utilities, in landfills and impoundments. These proposals address matters raised in litigation and implement court decisions, legislation, petitions for reconsideration, and rule implementation, and encourage appropriate beneficial use. These proposals are a large part of EPA's efforts to provide a clear and stable regulatory framework for coal ash management and disposal. EPA will be proposing additional revisions and the regulations governing a federal permit program in FY 2020.

One of the agency's proposal amends certain closure provisions in the regulations for the disposal of coal ash. This proposal is one of several planned revisions to provide a clear and stable regulatory framework for coal ash management and disposal and address matters raised in litigation, legislation, petitions for reconsideration, and rule implementation.

In the other one, EPA proposed a regulation to address issues associated with piles of coal ash, which supports beneficial use while providing protection for human health and the environment. These beneficial use provisions will deliver additional positive environmental, economic, and product benefits.

"We applaud the Trump EPA's latest efforts to protect coal mining and the livelihoods of those who depend on its success in West Virginia. The proposed regulations will improve the regulatory burden on the coal industry and lower the cost of electricity for West Virginians," said West Virginia Attorney General Patrick Morrisey.

"Oklahoma pursued a State program because we felt it was the most efficient way to protect the public and meet the needs of industry. We continue to believe that federal standards are best implemented at the local level. We will commit to revise our program to ensure it remains as protective as the federal

program. We also strongly endorse beneficial reuse as a means of sustainably managing CCR when accomplished in a manner protective of human health and the environment," said Oklahoma Secretary of Energy and Environment Kenneth Wagner.

"We fully support the EPA's efforts to develop guidelines that enable states to develop a workable regulatory framework for coal combustion residuals and effluent guidelines while still protecting the environment," said Kentucky Energy and Environment Cabinet Secretary Charles Snavely.

Federal and State Coal Ash Permitting
In 2018, EPA approved the first-in-the-nation state coal ash permitting program for Oklahoma. In 2019, EPA proposed a streamlined, efficient, federal permitting program for the disposal of CCR and approved the state of Georgia's permit program for the management of CCR in landfills and surface impoundments. This approval makes Georgia the second state in the nation with an approved coal ash permit program.

"Today, we take an important step in supporting our state partners as they move forward in managing the disposal of coal ash," said EPA Administrator Andrew Wheeler. "Placing implementation of coal ash regulations more fully into the hands of the State of Georgia empowers those with local expertise to oversee these operations, which is a safer and more effective approach to disposal."

"Today's action provides the state of Georgia with much needed certainty as they continue to implement their coal ash program," said EPA Region 4 Administrator Mary S. Walker. "State permitting programs, like Georgia's are an effective approach for coal ash management and will ensure that environmental standards are met."

"Georgia has been a leader in addressing coal ash disposal. Under Georgia's rules, all 27 coal ash ponds in the state are required to cease acceptance of waste and close," said Georgia Environmental Protection Division Director Richard Dunn. "EPA's approval of our coal ash management program means that closure will be enforced through a permit, which allows for the direct oversight, review, and approval of the utilities' monitoring and clean-up activities."

"The State of Georgia is a shining example of how partnerships between local leaders and the federal government can deliver vital results for the American people," said Congressman Rob Woodall (GA-07). "I look forward to monitoring Georgia's successes under the leadership of EPA Administrator Andrew Wheeler and Governor Brian Kemp in managing and properly disposing of coal ash under the permit program, and I am optimistic that the state will continue to pursue innovative solutions to recycling coal ash and limiting waste."

"I'm proud that the State of Georgia is leading the country in developing a plan to manage coal combustion residuals, which pose serious health hazards for Americans if left unchecked," said Congressman Hice (GA-10). "This program is a great example of what can happen when states are empowered to determine the rules that best meet their needs rather than implementing a top-down, one-size-fits-all approach."

"This announcement by the EPA is great news for the state of Georgia, and the hard-working folks at the Georgia Environmental Protection Division, as the EPA's coal ash permit program is practical and cost effective," said Congressman Barry Loudermilk (GA-11). "I am a fervent supporter of returning

environmental protection regulation to the states, which is also why I supported the 2016 Water Infrastructure Improvements for the Nation Act which gives the states this authority."

The proposal sets up a federal permitting program for coal ash units as required by the 2016 Water Infrastructure Improvements for the Nation Act. EPA has used the lessons learned from many years of implementing hazardous waste and other permitting programs to design an efficient, federal CCR permitting process. EPA would implement this permit program directly in Indian Country, as it does other Resource Conservation and Recovery Act programs, and at coal ash facilities located in states that have not submitted their own coal ash permit program for approval. Issuance of a permit will provide increased clarity to owners and operators of units about their obligations because the rule requirements can be tailored to specific conditions at the unit. The permit process will also provide an opportunity for public participation.

Aerosol Cans Final Rule
EPA finalized a streamlined system for managing hazardous waste aerosol cans that is clear, practical, and protective and promotes recycling. EPA estimates this change will save at least $5.3 million annually in regulatory costs.

"This rule will benefit approximately 25,000 facilities across numerous industries such as the retail, construction, and manufacturing sectors" said EPA Administrator Andrew Wheeler. "The simplified structure of the universal waste program will help improve regulatory compliance, make aerosol can collection more economical, and facilitate the environmentally sound recycling of this common waste stream."

This final rule will promote greater consistency for the regulated community as several states already include aerosol cans in their universal waste programs. The final rule offers a more uniform, nationwide handling system and furthers our effective partnerships with states and tribes by making it easier for states to add this waste stream to their universal waste programs.

Defective Takata Airbag Inflator Interim Rule
The agency announced an interim final rule to facilitate the urgent removal of defective Takata airbag inflators from vehicles and prevent defective Takata airbag inflators in scrap vehicles from being reused. The rule also advances the safe management of airbag wastes during accumulation, collection, storage and disposal. It is estimated to result in a net cost savings of 1.7 to 13 million dollars annually.

The Takata airbag recall involves 19 vehicle manufacturers and approximately 65 to 70 million airbag inflators scheduled to be recalled by December 2019. The interim final rule will help expedite removal of defective Takata airbags from vehicles by automotive dealerships, salvage yards, and other locations by exempting their collection from some Resource Conservation and Recovery Act (RCRA) hazardous waste requirements as long as certain conditions are met and they are ultimately disposed of at a RCRA designated facility.

The rule will provide clear direction to auto dealers, scrap recyclers, and small businesses on proper disposal of these airbags while being protective of both human health and the environment.

Hazardous Waste Pharmaceuticals Final Rule

EPA Administrator Andrew Wheeler signed a final rule streamlining standards for managing hazardous waste pharmaceuticals in the healthcare sector. The final rule is expected to result in up to $15 million in costs savings annually.

"These common-sense updates will help the healthcare sector safely manage hazardous waste pharmaceuticals and will reduce the amount of pharmaceutical waste entering our waterways by roughly 2,000 tons," said EPA Acting Administrator Andrew Wheeler. "By streamlining the standards for the healthcare sector, this final rule will protect drinking water and generate up to $15 million annually in cost savings."

The final rule offers streamlined standards for handling pharmaceutical wastes to better fit the operations of the healthcare sector while maintaining protection of human health and the environment. In addition, as part of this rule, EPA is bolstering the protection of our nation's waterways by prohibiting the "sewering" of hazardous waste pharmaceuticals. This will make our drinking and surface water safer and healthier by reducing the amount of hazardous waste pharmaceuticals entering our waterways by an estimated 1,600 – 2,300 tons annually. EPA has a long-standing policy of strongly discouraging the flushing of pharmaceuticals down the drain in any situation.

The rule provides flexibilities and benefits for hospitals, pharmacies, and doctor's offices to safely manage hazardous waste pharmaceuticals. Also, under this final rule FDA-approved over-the-counter nicotine replacement therapies (i.e., gums, patches, lozenges) will no longer be considered hazardous waste when discarded, which will result in significant cost savings and burden reduction for the healthcare industry. In addition, the final rule eliminates dual regulation for hazardous waste pharmaceuticals that are also Drug Enforcement Agency controlled substances, further easing regulatory burden.

Sustainable Materials Management

Recycling

In honor of America Recycles Week, EPA hosted the second annual America Recycles Summit on America Recycles Week and the first-ever Innovation Fair. The Innovation Fair featuring entrepreneurs from across the recycling system showcasing their innovative products, services, outreach, and technologies. At the fair, EPA Administrator Andrew Wheeler, the National Waste and Recycling Association (NWRA) President Darrell Smith and NWRA Board Chair Ben Harvey presented challenge coins to veterans recognizing their service and commitment to environmental protection.

"I am proud to help launch the first America Recycles Innovation Fair that brought together entrepreneurs from across the recycling system to showcase their innovative products, services, outreach and technologies," said EPA Administrator Andrew Wheeler. "Under the Trump Administration, EPA is working diligently to identify market-based strategies and innovative ideas to create a more sustainable recycling system in America and across the globe. I look forward to continuing our work with our partners to improve infrastructure, develop secondary markets, and more effectively communicate with the public about addressing the entire lifecycle of recycled materials."

The Summit engaged executives and leaders from across the recycling value chain to build on their success over the last year and commit to continuing to work together through implementation of a national framework to advance recycling in the U.S.

"On America Recycles Day, I am proud to release the National Framework for Advancing the U.S. Recycling System, which summarizes our accomplishments over the past year and recommends actions for 2020," said EPA Administrator Andrew Wheeler. "Under the Trump Administration, EPA is working diligently to identify market-based strategies and innovative ideas to create a more sustainable recycling system in America and across the globe. I look forward to continuing our work with our partners to improve infrastructure, develop secondary markets, and more effectively communicate with the public about addressing the entire lifecycle of recycled materials."

"The President's Executive Order on Efficient Federal Operations directed Federal agencies to increase the efficiency of Federal buildings and vehicles, improve environmental performance, and reduce costs," said White House Council on Environmental Quality Chairman Mary Neumayr. "Agencies continue to innovate and advance solutions to drive waste diversion and recycling. Last year, agencies diverted more than 50% of their municipal solid waste from landfills. I look forward to continuing to work with Federal agencies as well as States, localities, academia, and the private sector to support waste prevention and recycling."

"The Trump Administration recognizes marine debris poses a significant threat to our oceans, marine life, and coastal communities. Together we can support development of next-generation biodegradable plastics and enhance recycling efforts through the implementation of a robust national framework and committed partnerships. We look forward to collaborating with industry and appropriate stakeholders to develop innovative, cost-effective technologies to gather, recycle, and treat plastic waste," said White House Office of Science and Technology Policy Director Dr. Kelvin Droegemeier.

"This past year EPA has brought some of the most innovative, forward thinking organizations to the table to solve some key challenges in the recycling system. I have no doubt that together we can leverage our collective resources and expertise to strengthen the U.S. recycling system," said EPA Office of Land and Emergency Management Assistant Administrator Peter Wright.

"This is an issue that touches homes and communities across the nation and at the same time offers everyone the opportunity to be better stewards of the environment," said Region 2 Administrator Pete Lopez. "Under the leadership of Administrator Wheeler, EPA is seeking to help provide an incredible opportunity for bringing a broad cross section of groups and individuals to have fruitful discussions about the complex challenges of recycling and the development of real-world, sustainable solutions."

Participants in the 2019 Summit represented a broad range of U.S.-based organizations, including manufacturers and brands; federal, state, tribal and local governments; non-profit organizations; and industry trade associations.

Since the 2018 Summit, more than 100 additional organizations have signed the pledge on EPA's website, committing to leveraging their collective expertise, strengths and resources to address U.S. recycling challenges and opportunities. As of today, 179 organizations in total have signed the pledge.

Prior to the Recycling Summit, Administrator Wheeler held an Executive Roundtable entitled "Building a Resilient Recycling System through Infrastructure Investment and Market Development" where participants committed to working together over the next year to implement a national framework for advancing the U.S. recycling system. Participants included senior executives and leaders from the White House Council on Environmental Quality, The Aluminum Association, American Chemistry Council, American Forest & Paper Association, Arkansas Department of Energy and the Environment, Association

of Plastic Recyclers, Association of State and Territorial Solid Waste Management Officials, Coca-Cola, DC Department of Public Works, Environmental Research and Education Foundation, Glass Packaging Institute, GreenBlue Institute, Grocery Manufacturers Association, Institute of Scrap Recycling Industries, Keep America Beautiful, Kuerig Dr. Pepper, National Tribal Operations Council, National Waste and Recycling Association, Nestle, Paper Recycling Coalition, PepsiCo, Plastics Industry Association, Procter & Gamble, The Recycling Partnership, Solid Waste Association of North America, Southeast Recycling Developing Council, Steel Manufacturers Association, Toyota North America, U.S. Chamber of Commerce, U.S. Conference of Mayors, Walmart, and Waste Management.

WasteWise

This year marked 25 years of the WasteWise program, which encourages corporations, businesses, educational institutions and governments to set sustainability goals and track progress in preventing and recycling waste, saving resources and money. As one of EPA's longest-standing partnership programs, WasteWise was launched in 1994 and has involved thousands of participants over its 25 years. During the duration of the program, participants have prevented and diverted 247 million tons of materials from going to landfills or incinerators. This has saved participating companies as much as an estimated $11.1 billion in avoided landfill tipping fees.

Reducing Food Waste

This year, EPA and USDA worked with President Trump to successfully designate April 2019 as "Winning on Reducing Food Waste Month" to garner national attention on the need to address food loss and waste.

"Reducing food waste and redirecting excess food to people, animals, or energy production provide immediate benefits to public health and the environment. I am proud to join President Trump and my federal partners in recognizing April as Winning on Reducing Food Waste Month," **said EPA Administrator Andrew Wheeler.** "We are working closely with our federal partners and stakeholders across the nation to reduce the amount of food going to landfills and maximize the value of our food resources."

"USDA alone cannot end food waste, it will require partners from across the supply chain working together on innovative solutions and consumer education. We need to feed our hungry world and by reducing food waste, we can more wisely use the resources we have. I am pleased President Trump identified this issue as one of importance, and I look forward to USDA's continued work with our agency partners at EPA and FDA to change behavior in the long term on food waste," **said U.S. Secretary of Agriculture Sonny Perdue.**

"With 1 in 6 people getting a foodborne illness every year in the U.S. and up to 40 percent of food left uneaten, it's understandable why food safety and food waste are major societal concerns," **said FDA Deputy Commissioner Frank Yiannas.** "The FDA is working to strengthen its collaboration and coordination with the EPA and USDA to strategically align our federal efforts between the two issues to better educate Americans on how to reduce food waste and how it can be done safely."

To celebrate EPA, USDA and FDA hosted an event at EPA headquarters with state, local and community leaders and stakeholders to discuss how government can reduce food loss and waste during "Winning on Reducing Food Waste Month." At the event, the three agencies released the Winning on Reducing Food Waste Federal Interagency Strategy, which prioritizes six main areas for action in reducing food loss and waste. The six areas are to: enhance interagency coordination, increase consumer education

and outreach efforts, improve coordination and guidance on food loss and waste measurement, clarify and communicate information on food safety, food date labels and food donations, collaborate with private industry to reduce food loss and waste across the supply chain and encourage food waste reduction by federal agencies in their respective facilities.

That same month, EPA, USDA, and FDA signed a formal agreement with the non-government organization ReFed outlining closer cooperation on reducing food waste to achieve the U.S.'s national goal of reducing food loss and waste by 50% by 2030. The agencies and ReFED agreed to develop approaches for measuring the success of food waste strategies, advance data collection and measurement efforts, and to participate in the Further with Food: Center for Food Loss and Waste, among other activities.

In August 2019, Administrator Wheeler recognized the St. Louis Cardinals baseball club, Green Dining Alliance, and the Urban Chestnut Brewing Company for their efforts to divert, donate, and compost food waste during an on-field ceremony at St. Louis' Busch Stadium.

In October, EPA USDA, and FDA signed an MOU with the Food Waste Reduction Alliance (FWRA) to formalize industry education and outreach efforts on reducing food loss and waste. The founding members of FWRA: The Grocery Manufacturers Association, Food Marketing Institute and the National Restaurant Association, represent three major sectors of the food supply chain: food manufacturing, retail and restaurant and food service.

Administrator Wheeler also went on several food waste related tours in New York City in October. He toured FreshDirect's newest Bronx facility and then participated in an onsite roundtable discussion on NYC's food waste reduction efforts with leaders from ReFED, City Harvest NYC and PepsiCo. Administrator Wheeler and EPA staff joined NGO Rock and Wrap it Up! to hand out excess food diverted from Yankee Stadium and Costco to local Bronx residents in need at Woodycrest United Methodist Church.

Leaking Underground Storage Tank Cleanups

EPA and its partners completed 8,358 LUST cleanups, which was nearly a 3 percent increase over FY18 totals. The increase marked the end of a multi-year decline in the cleanups completed since 2013. EPA placed a priority on working with state and tribal partners to increase the number of cleanups completed. As a result, several states have effectively implemented dedicated efforts which has not only boosted their cleanup activities but has also resulted in more cleanups being completed nationwide. With the collective efforts of EPA and its partners during 2019, EPA now has fewer than 60,000 sites in backlog.

CHEMICALS

Continued Progress under the Frank R. Lautenberg for the 21st Century Act

Over the past year, EPA continued implementation of the 2016 Frank R. Lautenberg for the 21st Century Act, which amended the Toxic Substances Act. In addition to reviewing the chemicals currently in commerce that many rely on daily, EPA staff worked tirelessly to ensure that the most modern and innovative chemicals get to market quickly and safely, providing regulatory certainty for manufacturers and confidence for American consumers.

- Updating the TSCA Chemical Substance Inventory: In February, EPA released a major update to the list of chemical substances that are manufactured or processed (including imports) in the

United States. For the first time, all the listed chemical substances are designated as "active" or "inactive" in U.S. commerce. This gives EPA and the public an up-to-date picture of the chemical substances in commerce, which is important for transparency and the agency's ongoing existing chemical review process. The update in September included another important transparency improvement for stakeholders: the inclusion of unique identifier (UID) information. The UID is a numerical identifier assigned to a chemical substance when EPA approves a confidential business information (CBI) claim for specific chemical identity. This provides the public with a way to connect the specific chemical identity of chemicals previously listed on the confidential portion of the TSCA Inventory with other relevant information in the Agency's holdings.

- Conducting Peer Reviews of Existing Chemical Risk Evaluations: In 2019, EPA continued its work on the first ten chemicals selected for risk evaluation under TSCA. During the year, EPA held four peer review meetings to review the draft evaluations of six of those chemicals. EPA is going beyond what TSCA requires by engaging the Scientific Advisory Committee on Chemicals (SACC) peer review process for each of EPA's first ten risk evaluations. This increases public transparency and involvement in the risk evaluation process and the scientific credibility of and public confidence in EPA's findings.
- Designating High Priority Chemicals for Risk Evaluation: In March, EPA published a list of 40 chemicals to initiate a new process of prioritizing and reviewing chemicals currently in commerce. EPA has proposed that 20 of those chemicals be designated as low priority for evaluation. In December, EPA designated the remaining 20 of these chemicals as "high priority" for risk evaluation: seven chlorinated solvents, six phthalates, four flame retardants, formaldehyde, a fragrance additive, and a polymer. In 2020, EPA will begin a 3-year risk evaluation process to determine whether each high-priority chemical, under the conditions of use, presents an unreasonable risk.
- Proposing PBT Rule: In June, EPA proposed a rule to reduce exposure to four persistent, bioaccumulative, and toxic chemicals (PBTs) in order to protect human health and the environment. Amended TSCA requires EPA to take expedited action on specific PBT chemicals to address risk and reduce exposures to the extent practicable. EPA identified five PBT chemicals for expedited action in 2016; for one of those five chemicals, hexachlorobutadiene, EPA evaluated the conditions of use and proposed no action because the agency did not identify any practicable ways of further reducing human or environmental exposure to the chemical substance.

Transparency Initiatives

EPA took a host of actions this year to carry out the Administrator's commitment to increase transparency and public access to critical information about chemicals. Some highlights include our work on:

- New Chemicals: In May, EPA rolled out the New Chemical Case Tracker, so that new chemical submitters and the public can learn from EPA's website the status of the review of any new chemical undergoing review. This tool also provides aggregate statistics on new chemicals submissions. EPA also made significant updates to its ChemView database; beginning in May, all new pre-manufacture notices and their non-CBI attachments (including health and safety studies) have been made available to the public within 45 days or receipt.
- CBI: This year, EPA published and supplemented a proposed rule establishing the plan for EPA's review of manufacturer confidentiality claims and procedures for companies to substantiate those claims. This proposed rule makes transparent how EPA will review of CBI claims to ensure that all claims are allowable under the law. The final rule, encompassing both proposals will be finalized in early 2020. EPA is also increasing the availability of information for stakeholders

about all ongoing and completed TSCA CBI claim reviews, and in July began publishing information that shows EPA's progress in meeting amended TSCA's requirements around confidentiality claims.

Methylene Chloride Ban
In March, EPA Administrator Wheeler signed a final rule to remove methylene chloride from paint and coating removers in the retail consumer marketplace, including e-commerce sales. After November 22, paint removal products containing MC may not be sold at or by any retail or distribution establishments that have consumer sales. EPA is now looking at 72 other methylene chloride uses to evaluate and manage any risks associated with those uses.

"EPA's action keeps paint and coating removers that contain the chemical methylene chloride out of consumers' hands. It is against the law to sell or distribute methylene chloride for paint and coating removal in the retail marketplace—a step that will provide important public health protections for consumers."

Asbestos Significant New Use Rule (SNUR)
In April, EPA issued a final rule safeguarding the public against discontinued asbestos products. With this rule, EPA ensured that discontinued asbestos products cannot be reintroduced into commerce without EPA review and the opportunity to restrict or prohibit use of the products. This is the first time in thirty years that EPA took action on products that contain asbestos under TSCA. This action is part of a holistic approach that EPA is taking to use all available tools under TSCA to protect the public from asbestos exposure. Of particular note, the agency is reviewing ongoing uses of asbestos as one of the first 10 chemicals selected for risk evaluation under amended TSCA.

Administrator Wheeler's Letter to the Editor in The New York Times: "Before to our rule, asbestos products that were no longer on the market could come back without any agency review, without any EPA restrictions, and without any opportunity for the agency to prohibit that use. Our rule closed this dangerous loophole."

Final Dust-Lead Hazard Standards Rule
In June, EPA issued the Dust-Lead Hazard Standards rule, which set tighter standards for lead in dust on floors and window sills to protect children from the harmful effects of lead exposure. The more protective dust-lead hazard standards took effect on January 6, 2020, and applies to inspections, risk assessments, and abatement activities in pre-1978 housing and certain schools and child care facilities across the country. This important rule followed through on commitments in the Federal Lead Action Plan to take steps to reduce childhood lead exposure and helps property owners, lead paint professionals, and government agencies identify lead hazards in residential paint, dust and soil.

Prioritizing Efforts to Reduce Animal and Avian Testing
In September, EPA Administrator Wheeler issued a Directive to prioritize efforts to reduce animal testing. Administrator Wheeler emphasized the importance of developing new technologies, methodologies and approaches to achieve two important and entirely compatible goals: providing information on chemical hazard and potential human exposure while avoiding or significantly reducing the use of testing on animals.

In one of its first steps to implement the September directive, EPA released a draft science policy intended to reduce testing of pesticides on birds when registering conventional outdoor pesticides.

Based on a study conducted with PETA of data supporting pesticide registrations since 1998, OCSPP concluded that for most pesticides it can confidently assess acute risk for birds using one protocol rather than two, thereby saving about 720 birds each year.

To reduce animal testing, EPA is focusing on alternatives for acute toxicity testing of pesticides and other chemicals. To this end, EPA hosted the first annual conference on New Alternative Methodologies in December to engage leading scientists in the field. OCSPP's efforts in recent years have saved more than 200,000 laboratory animals and reduced costs to the pesticide industry by more than $300 million while maintaining public confidence in EPA's scientific conclusions.

Pesticide Actions
In this fiscal year, EPA registered 22 new active ingredients, most of which were classified as reduced-risk pesticides, and over 230 new uses of existing pesticides. These registration decisions provide additional tools to help growers meet their pest management needs.

EPA also published 85 draft human health or ecological risk assessments, 76 proposed interim decisions (including the proposed interim decision for glyphosate), and 79 final/interim decisions in the re-evaluation of existing pesticides, including high-profile chemicals like glyphosate, soil fumigants and antibiotics to control citrus greening. This work supports the agency's requirement under FIFRA section 3(g) to review each pesticide every 15 years, ensuring that currently registered pesticides continue to meet federal safety standards and are available to growers.

In addition, EPA achieved several pesticides "firsts," including the following:

- Bacteriophage active against Xylella fastidiosa: In April, registered the new active ingredient bacteriophage to fight Xylella fastidiosa. Also known as Pierce's disease, the bacterium threatens the livelihood of U.S. grape growers. The product containing the bacteriophage will be the first pesticide product available to U.S. grape growers, including those growing organic grapes, to directly control Pierce's disease.
- New Products to Fight Dangerous Fungal Infections: EPA registered five products this year for use against the emerging fungal pathogen Candida auris (C. auris), which the CDC in November described as an urgent threat. C. auris often causes serious and sometimes fatal fungal infections, especially in hospitalized patients. Because it can be resistant to antifungal drugs, healthcare providers eagerly anticipated availability of the products.
- First Rodenticide in 20 Years: EPA registered the first new rodenticide in 20 year to control mice inside homes and buildings. Alphachloralose is designed to lower body temperature in mice, eventually putting the mouse to sleep before it dies. The rodenticide is safe to use in homes and buildings because it is not harmful to adults, children and larger household pets.

Improving the Endangered Species Act Process for Pesticides
EPA also took significant steps this year to improve the Endangered Species Act (ESA) consultation process for pesticide registration and registration review activities. As part of this effort, EPA solicited public comment on a draft method for conducting biological evaluations of the effect of pesticides on threatened or listed endangered species. EPA also launched the new FIFRA-ESA Interagency Working Group established by the 2018 Farm Bill and convened the first Working Group meeting in June 2019. In addition to Administrator Wheeler, the first Working Group meeting included U.S. Department of Agriculture (USDA) Secretary Sonny Perdue, Department of Commerce Secretary Wilbur L. Ross, Jr., Department of Interior Secretary David Bernhardt, and Council on Environmental Quality (CEQ) Chairman Mary B. Neumayr.

Proposed Updates to Worker Protection Standard
In October, EPA proposed to clarify and simplify the application exclusion zones for outdoor production pesticide applications. The proposed updates to EPA's Worker Protection Standard would improve enforceability for state regulators and reduce regulatory burdens for farmers. The revision will maintain public health protections for farm workers and other individuals near agricultural establishments that could be exposed to agricultural pesticide applications.

Glyphosate Proposed Interim Decision
In April, EPA released for public comment the proposed interim registration decision on glyphosate, the most widely used herbicide in agriculture. After carefully accounting for public comments on its draft human health risk assessment, EPA's findings continued to show no risk to human health from current uses of glyphosate, no indication that children are more sensitive to glyphosate, no evidence that glyphosate causes cancer, and no indication that glyphosate is an endocrine disruptor. The proposal included measures to address pesticide spray drift and other measures to better avoid the problem of weed-resistance. EPA received over thousands of unique comments on the proposed interim decision and anticipates issuing a final regulatory decision in January 2020.

ENFORCEMENT
In FY 2019 EPA's enforcement and compliance assurance actions this past year resulted in:

- **7.56 million pounds** of emissions prevented from mobile sources, **an increase of nearly 6.9 million pounds from 682 thousand pounds prevented in 2018.**
- Investment of over **$5 billion** in actions and equipment that achieve compliance with the law and control pollution.
- **$469 million** in combined Federal administrative and judicial civil penalties and criminal fines.
- Commitments to reduce, treat, or eliminate **359 million pounds of pollution** (air, toxics, and water).
- **Opened 170** criminal cases **which was an increase from 129 criminal cases opened in FY 2018**
- A total of **137 criminal defendants were charged** which resulted in **76 years** of incarceration for individual defendants
- Commitments to treat, minimize, or properly dispose of over an estimated **4.7 million pounds of waste**.
- Commitments to clean up nearly **13 million cubic yards** of contaminated soil and water.
- **Cleanups and redevelopment at over 160 sites** through use of Superfund enforcement tools, **an increase of 6 sites from 2018.**

Priorities
Looking ahead, EPA announced seven enforcement and compliance assurance priority areas for fiscal years 2020-2023. Six of the seven priorities are National Compliance Initiatives (NCIs), which will be led by EPA's Office of Enforcement and Compliance Assurance (OECA). For the seventh priority area, OECA will contribute to the agency's implementation of the Lead Action Plan, which was issued by the President's Task Force on Environmental Health Risks and Safety Risks to Children in December 2018.

These NCIs advance the Agency Strategic Plan's objectives to improve air quality, provide for clean and safe water, ensure chemical safety, and improve compliance with our nation's environmental laws while enhancing shared accountability between the EPA and states and tribes with authorized environmental programs.

Partnership Policy
EPA aims to enhance its partnerships with its state, local, and tribal co-regulators by more effectively carrying out our shared responsibilities under environmental laws. The partnership policy, signed July 11, 2019, sets out expectations and procedures for enhancing effective partnerships in civil enforcement and compliance assurance work between EPA and states that are authorized, delegated, or approved to implement federal environmental programs.

"The policy reflects the dialogue we have had with our state partners on enhancing our work together," **said EPA Office of Enforcement and Compliance Assurance Assistant Administrator Susan Bodine**. "The final policy clarifies roles and provides a clear roadmap that EPA and our state partners can use to more effectively achieve our shared goal of increasing compliance with environmental regulations."

"The Environmental Council of the States committed to this partnership with EPA to drive improvements in effective and efficient enforcement and compliance assurance outcomes. We look forward to better realization of shared goals for future environmental progress," **said ECOS President Arkansas Department of Energy and Environment Secretary and Becky Keogh**. "We look forward to better realization of shared goals for future environmental progress."

Self-Disclosed Violation Policies

- In 2019, OECA continued to see an increase of entities, including new owners, utilizing its self-disclosed violation policies that encourage regulated entities to voluntarily discover, disclose, and correct violations of federal environmental laws and regulations.
- Specifically, in 2019, 650 entities, including new owners, voluntarily disclosed violations with 873 facilities pursuant to the self-disclosure policies.

Superfund Enforcement
Kalamazoo River Superfund Site Settlement

- In December, EPA announced a proposed consent decree that would require NCR Corp. to clean up and fund future response actions at a significant portion of the Allied Paper Inc./Portage Creek/Kalamazoo River Superfund site.
- The Allied Paper Inc./Portage Creek/Kalamazoo River Superfund site is in Allegan and Kalamazoo counties and is divided into six segments, or operable units (OUs), that require cleanup. According to the settlement terms, NCR Corporation has agreed to spend approximately $135.7 million cleaning up three areas of OU 5. OU 5 includes 80 miles of the Kalamazoo River and three miles of Portage Creek. In addition, NCR will pay:
    - $76.5 million to EPA for past and future costs in support of river cleanup activities;
    - $27 million to natural resource trustees of the Kalamazoo River Natural Resource Trustee Council for natural resources damage assessment and claims; and
    - $6 million to State of Michigan for past and future costs.

Nuclear Metals Superfund Site Settlement

- In October, EPA announced the filing of a consent decree with the four parties responsible for contamination at the Nuclear Metals Superfund site in Concord – a Superfund site listed on the National Priorities List in 2001. Under the agreement, the United States, on behalf of the U.S. Army and U.S. Department of Energy, along with Textron Inc. and Whittaker Corporation, will address the cleanup of the site at an estimated cost of approximately $125 million.

- From 1958 to 1985, wastes contaminated with depleted uranium, copper, and nitric acid were disposed into an unlined holding basin at the site. Volatile organic compounds (VOCs), which likely contained 1,4-dioxane as a stabilizer, were used as solvents and degreasers for the cleaning of machines and machined parts/products and discharged through floor drains to an on-site cooling water pond that resulted in contamination of an on-site supply well.
- "This settlement allows EPA to move forward on the much-needed cleanup of contaminated groundwater, soil and sediment at this site," said Susan Bodine, Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance. "It's a good example of EPA's cleanup enforcement program bringing potentially responsible federal and private parties together to achieve clean up at contaminated sites."

Fox River Superfund Site Settlement

- A March 2019 settlement concluded 20 years of successful enforcement work to hold responsible parties accountable and allow for the removal and containment of much of the PCB-contaminated sediment from the Lower Fox River and Green Bay Superfund site in Wisconsin by dredging and specially-engineered caps. This settlement has greatly reduced the risks to humans and wildlife posed by PCB exposure and contaminated sediments in the Lower Fox River and Green Bay. In the settlement P.H. Glatfelter Company will pay $20.5 million to reimburse past EPA costs to clean up PCBs in river sediment and natural resources damages in addition to reimbursing all future government costs of overseeing one of the nation's largest Superfund cleanup projects at Wisconsin's Lower Fox River and Green Bay site. This settlement ends all Superfund litigation at the Site.

Civil and Criminal Cases

Starting 2011, EPA's criminal enforcement program had been declining. The agency reversed that trend in FY 2018 and again in FY 2019, when EPA's criminal enforcement program increased its results across multiple metrics used by the agency.

- New criminal cases opened by EPA increased from 129 in 2018 to 170 in 2019.
- The number of defendants charged in criminal cases increased from 107 in 2018 to 133 in 2019.
- Criminal fines increased from $27,591,215 in 2018 to $45,362,180 in 2019.
- Restitution from criminal cases increased from $58,842,772 in 2018 to $60,118,164 in 2019.

Fiat Chrysler Automobiles (FCA) Settlement

- In January, EPA and California announced a settlement over allegations that FCA had violated the Clean Air Act and California law. As a result, FCA is paying a penalty of $305 million and will spend up to $185 million for vehicle recall and mitigation programs. The recall will install updated vehicle software that meets EPA and California emission standards and the mitigation program will improve the effectiveness of 200,000 aftermarket catalytic converters sold for use on light-duty vehicles by July 1, 2020.
- The settlement resolves claims relating to the sale of over 100,000 EcoDiesel Ram 1500 and Jeep Grand Cherokee vehicles (Model Years 2014-2016) equipped with software designed to "cheat" inspection tests, resulting in higher emissions when driven on the road.

IAV GmbH

- In May, IAV GmbH (IAV), a German company that engineers and designs automotive systems, was sentenced to pay a $35 million criminal penalty in the Eastern District of Michigan.

- The penalty is the result of the company's guilty plea for its role in the long-running scheme for Volkswagen AG to sell approximately 335,000 diesel vehicles in the U.S. by using a defeat device to cheat on mandated U.S. emissions tests.
- IAV admitted that it and its co-conspirators knew the vehicles did not meet U.S. emissions standards and worked collaboratively to design, test, and implement cheating software.

NYC Hillview Reservoir Consent Decree

- EPA and U.S. Department of Justice secured a consent decree that requires the City of New York and New York City Department of Environmental Protection to address their longstanding failure to cover the Hillview Reservoir located in Yonkers, New York.
- The consent decree will make improvements and cover the Reservoir at an estimated cost of $2.975 billion and to pay a $1 million civil penalty was also lodged with the Court.
- The NYC Hillview Reservoir is part of New York City's public water system, which delivers up to a billion gallons of water a day. Since the Reservoir is an open storage facility, the treated water in the Reservoir is subject to recontamination with microbial pathogens from birds, animals, and other sources, such as viruses, *Giardia*, and *Cryptosporidium*.
- On May 15, 2019, the United States District Court entered a consent decree addressing New York City's longstanding violations of the Safe Drinking Water Act (SDWA). The decree creates a judicially enforceable schedule for the City for phased work and associated milestones; the final deadline is 2049.

Hyundai Construction Equipment Americas Inc.

- Hyundai Construction Equipment Americas, Inc. (HCEA) pled guilty in the Northern District of Georgia to Conspiring to Violate the Clean Air Act and to Defraud the United States.
- HCEA was sentenced to pay a criminal fine of $1,950,000.
- The charges related to construction equipment Hyundai imported for sale into the United States from the Republic of Korea that contained engines that did not comply with air emissions standards under the Clean Air Act.
- HCEA violated the Clean Air Act regulations by: (a) importing more Tier 3 and TPEM diesel engines than allowed by the Clean Air Act regulations; and (b) filing at least one annual report with false material information and intentionally omitting material information.

Environmental Justice & Opportunity Zones

In 2019, EPA provided grants, technical assistance, tools, and training to help communities ensure that new investment brings environmental and public health benefits, in addition to economic revitalization. EPA expanded its ongoing efforts by prioritizing those communities located in Opportunity Zones, a designation created through the Tax Cuts and Jobs Act of 2017.

EPA Administrator Andrew Wheeler participated in the first White House Opportunity and Revitalization Council, which was created in Executive Order 13853, to better coordinate federal economic development resources in Opportunity Zones and other distressed communities. In 2019:

1) EPA provided $64.6 million to 151 communities with Brownfields grants, which will provide communities with funding to assess, clean up, and redevelop underutilized properties. 108 of those communities – over 70% – had identified sites or targeted areas within Opportunity Zones. In June, Scott Turner, Executive Director of the White House Opportunity and Revitalization Council, accompanied Administrator Andrew Wheeler to Dauphin County, Penn.,

to announce the grant award.

2) EPA provided 26 organizations with a total of $5.1 million in grants for environmental job training programs across the country, all of which will serve communities located in Opportunity Zones.

3) EPA awarded $1.5 million in grants to 50 organizations working to address environmental justice challenges in their communities, with more than half going to support communities located in Opportunity Zones.

4) EPA provided technical assistance to over 30 communities to help revitalize their downtowns and increase access to locally grown food through the Local Foods, Local Places program. Over 70% of those communities are in Opportunity Zones.

5) In October, EPA launched a new technical assistance program (in collaboration with U.S. Department of Agriculture – Forest Service and Northern Border Regional Commission) to help communities capitalize on recreation economy assets as a driver to revitalize downtowns and improve environmental outcomes, in support of Executive Order 13790 (*Promoting Agriculture and Rural Prosperity in America*). Half of the communities selected to receive support are adjacent to or located in Opportunity Zones.

"Under the Trump Administration, at EPA, we remain committed to ensuring that environmental justice is integrated into EPA's programs and activities to strengthen environmental and public health protections for low-income, minority, indigenous, and disadvantaged communities that are more likely to live near contaminated lands or be disproportionately impacted by environmental hazards," **said EPA Administrator Andrew Wheeler.**

EPA's Office of Environmental Justice (EJ) continued to make progress toward improving environmental and public health conditions for low-income, minority, indigenous, and disadvantaged communities that are more likely to live near contaminated lands or be disproportionately impacted by environmental hazards.

In March, EPA announced training to build the capacity of states to integrate environmental justice into their decision-making process. Over the year, EPA conducted a national webinar series developed in collaboration with state partners.

"South Carolina is proud to serve as a collaborative partner with the EPA as they unveil a new environmental justice training initiative for states. We are pleased the EPA is taking this important step to increase understanding of tools and resources that can be applied to address the needs of environmental justice communities," **said South Carolina Department of Health and Environmental Control Director of Environmental Affairs Myra Reece.**

The five national training webinars served as an ongoing resource for state staff and others interested in developing their environmental justice knowledge and expertise. Topics include identifying and prioritizing environmentally-impacted and vulnerable communities, enhancing community involvement in the regulatory process, using an area-wide planning approach to promote equitable development, and application of environmental justice to state environmental impact assessments. To complement the online trainings, EPA Regions conducted training on environmental justice for their respective states.

In November, EPA released the FY 2019 Annual Environmental Justice Progress Report highlighting agency efforts and accomplishments to assist vulnerable and overburdened communities.

Highlights:

- Awarded approximately **$50 million in funding for Diesel Emission Reduction Act projects** with priority given to projects that engage and benefit local communities and applicants that demonstrated their ability to promote and continue efforts to reduce emissions after the project has ended in communities or populations that have faced or are facing EJ concerns.
  Awarded **$29.4 million in targeted airshed grants** that will reduce environmental and public health impacts in several communities throughout the U.S.
- Provided technical assistance to communities affected by Superfund sites so that they could meaningfully contribute to the cleanup process, including **43 communities** that received Technical Assistance Grants (TAGs) and **37 communities** that received support through the Technical Assistance Services for Communities (TASC) Program.
- Collaborated with state partners to develop online trainings on approaches to integrate EJ in state policies and programs, **reaching over 4,000 people** representing government agencies in all fifty states, Puerto Rico, Guam and the District of Columbia.
- Selected 2020-2023 National Compliance Initiatives that prioritize impacts on vulnerable communities and will consider EJ issues throughout this work. Performed **868 EJ screenings in enforcement work**, which assures that EPA enforcement personnel working on a case are aware of the potential EJ concerns in a community.
- Trained and/or engaged with approximately **12,350 community residents**, conducted approximately **300 workshops and community forum activities** that addressed local environmental and public health issues, and developed approximately **50 new partnerships** between EJ grantees and local stakeholders. This resulted in forty-four underserved communities that felt the meaningful impacts of EJ funding received over the last two years. Twenty-nine of the communities were in predominantly rural states, with over 90% of the grantee organizations receiving their first EJ grant this decade.

International and Tribal Affairs
G7 & G20 Environment Ministers Meetings
EPA Administrator Andrew Wheeler represented the United States at the G7 and G20 Environment Ministers Meetings in Metz, France and Karuizawa, Japan respectively. At these meetings discussion included a wide range of international environment topics such as marine litter, biodiversity, and waste management. At the first-ever G20 Environment Ministers Meeting, countries adopted the G20 Implementation Framework for Actions on Marine Plastic Litter and the G20 Action Agenda on Adaption and Resilient Infrastructure.

"I want to thank French Minister for the Ecological and Inclusive Transition Francois de Rugy for bringing together our international partners to advance wide-ranging environmental issues," said EPA Administrator Andrew Wheeler. "The United States will continue to work with our G7 members to ensure we curb litter in our oceans, preserve our lands, and continue to clean the air for our citizens while ensuring economic prosperity."

In France, Administrator Wheeler began by meeting with Canadian Minister for the Environment and Climate Change Catherine McKenna where they focused on ways the United States and Canada can

work together on conservation and cleanup efforts for the Great Lakes region. Administrator Wheeler and Minister McKenna agreed to meet in the future at a location in the Great Lakes region to highlight the importance of the preservation of the Great Lakes and are looking for ways to partner with private sector stakeholders to ensure we keep our waters clean.

At the G7, Administrator Wheeler stressed the need for the ratification of the United States–Mexico–Canada Agreement (USMCA). Under this agreement, the United States, Canada and Mexico have agreed to the most advanced, highest standard environment chapter of any trade agreement to date. As a key achievement of the negotiations, the environment chapter includes first time provisions to address pressing environmental issues such as air quality and marine litter.

In addition to the general sessions at the G20, Administrator Wheeler had productive meetings with his counterparts on marine litter, waste management, water infrastructure, and access to clean drinking water. He met with ministers from Japan, South Korea, Brazil, and Thailand, and the Deputy Ministers from China, Saudi Arabia, and Vietnam. Six Asian nations are the largest contributors to marine litter. In the bilateral meetings with Japan and South Korea, he discussed working together to assist other Asian nations with reducing their contributions to marine debris.

"I want to thank Japanese Minister Yoshiaki Harada for bringing together our international partners for this historic, first-ever G20 environment ministers meeting," said EPA Administrator Andrew Wheeler. "The United States will continue to work with our G20 members to combat marine litter, improve water quality, and reduce air pollution while promoting innovation and economic prosperity."

Israel

To advance the Memorandum of Understanding on environmental cooperation between Israel and the U.S., which was signed in October 2018, the Administrator led an EPA delegation to Israel in November. While in Israel the Administrator Andrew Wheeler and the Israeli Minister of Environmental Protection Ze'ev Elkin announced their commitment to enhanced work in two areas:

1. Contaminated Sites Cleanup: EPA has been working with the Israeli Ministry of Environmental Protection to find technical approaches, including those using new and innovative technologies, and including a Study Tour to the U.S. in October 2019, to address the cleanup and redevelopment of contaminated former military sites.
2. Water Reuse Collaboration: EPA recently released a Water Reuse Action Plan and held a joint panel on Water Reuse with Israel at the Water Environment Foundation Technical Exhibition and Conference in September 2019. Israel recycles more than 85 percent of its water, while the U.S. only recycles about six percent. EPA hopes to learn much from Israel's best practices and approaches to help meet water scarcity challenges.

Preventing Marine Litter in Panama

EPA signed a new interagency agreement with State Department that supports the agency's solid waste management capacity building work and provides continuity to the marine litter program in Panama – Trash Free Waters – initiated in 2018. In 2020, EPA will conduct a facilitated national dialogue on solid waste and marine litter nexus and how stakeholders could collaborate to ensure that initiatives on both areas are better coordinated and complementary of each other.

[Need to add title for tribal section]

EPA consults with tribes on a wide-range of activities including: rules, permits, policies, and other decisions that may affect tribal interests. And this year – in July specifically – EPA completed it's 500th tribal consultation under the EPA Policy on Consultation and Coordination with Indian Tribes.

Administrator Wheeler co-chaired the National Tribal Operations Committee (NTOC) with Gerald Wagner, Acting Chair of the National Tribal Caucus in April, marking the 25th anniversary of the NTOC, marking an important milestone for high-level discussions between EPA leadership and tribal representatives from across the country. Discussions during the meeting included Waters of the United States, tribal considerations for state-delegated programs, lead management in Indian Country, and EPA's efforts to improve environmental program processes.

At the NTOC, Administrator Wheeler re-affirmed EPA's Policy for the Administration of Environmental Programs on Indian Reservations (1984), which is a tradition that all EPA administrators have continued since the original policy was enacted and the cornerstone for EPA's tribal program. This policy identifies opportunities for engaging and consulting with tribes.

"For 25 years, the NTOC has played a critical role in advancing EPA's partnership with tribes to strengthen public health and environmental protections in Indian Country," **said EPA Administrator Andrew Wheeler.** "Today, I was honored to reaffirm that the 1984 Indian Policy is, and will remain, the foundation of EPA's tribal program."

In August, EPA welcomed W. Scott Mason IV, a proud citizen of the Cherokee Nation and fifth generation western Oklahoman, as the new director for the American Indian Environmental Office.

This year EPA took a different approach with the Multipurpose Grant Program. This new approach resulted in over $3 million made available to tribes and consultation conducted by the American Indian Environmental Office which expanded the number of eligible tribes and the availability of new grant guidance.

Research & Development
Animal Testing Alternatives

- In September, EPA Administrator Andrew Wheeler signed a directive to prioritize EPA efforts to reduce animal testing including reducing mammal study requests and funding 30 percent by 2025 and eliminating them by 2035.
- At the same time, EPA's Office of Research and Development ORD announced $4.25 million in funding to five universities to research the development and use of alternative test methods and strategies that reduce, refine, and/or replace vertebrate animal testing.
- In December, ORD and OCSPP hosted its first annual conference on the State of the Science on Development and Use of New Approach Methods (NAMs) for Chemical Safety Testing. The one-day conference, which attracted more than 600 participants, including those on the phone and in person, focused on New Approach Methods (NAMs) for achieving reductions in animal testing. This event, which will take place annually, is a major step in implementing the vision Administrator Wheeler outlined in his September 2019 Directive for EPA to aggressively pursue reductions in animal testing.
- "This is a matter of sincere importance to me," said Administrator Wheeler, opening the conference at EPA headquarters. "Scientific advancements exist today that allow us to better predict potential risks without the use of traditional methods that rely on animal testing. With NAMs, we're able to evaluate more chemicals across a broader range of potential biological

effects, in a shorter time frame with fewer resources, while striving for equal or greater results. I look forward to continuing the work we've done with our partners toward reducing, replacing, and refining animal testing requirements moving forward."

Wildfire Smoke Guidance

In August 2019, EPA revised the Wildfire Smoke Guide. This version of the Wildfire Smoke Guide is the product of an interagency collaboration with partners including the U.S. Forest Service, U.S. Centers for Disease Control and Prevention, and State of California.

State Support & Engagement

- ORD has developed critical partnerships with state environmental agencies through the Environmental Council of the States (ECOS) — and its research arm, the Environmental Research Institute of the States (ERIS) — to address state research needs and ensure our work is relevant to environmental challenges in the field, and that ORD's scientific findings and applied tools are delivered and translated to decision makers.
- ORD hosted numerous visits of state environmental agency directors and staff to ORD facilities to discuss topics of interest to states and related science needs, and to share ORD S&T capabilities and EPA research to support states.
- ORD released the Cyan Mobile App that provides critical support to states and held the 16th Annual EPA Drinking Water Workshop and first ever satellite workshop for Region 6 small system owners and operators.
    - HABs Cyan mobile App: The EPA Cyanobacteria Assessment Network mobile application identifies harmful algal blooms in more than 2,000 U.S. lakes and reservoirs. In partnership with the National Aeronautics Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Geological Survey (USGS), EPA has been working to develop this early warning system using historical and current satellite data to help lake managers, water quality managers, and people swimming, fishing, or boating in lakes more quickly identify when there may be a bloom forming and avoid any potential health impacts to people, pets, livestock or the environment. This app reduces the need for scientific expertise in satellite data processing, analysis and interpretation, and eliminates barriers to computer hardware requirements associated with the use of satellite data files. In this easy to use, customizable interface, users can rapidly distill critical water quality information for their communities.
    - At the16th Annual EPA Drinking Water Workshop and first ever satellite workshop for Region 6 small system owners and operators in May 2019, EPA worked with several South-Central states including Texas, Louisiana, Arkansas, New Mexico, Oklahoma, and the Association of State Drinking Water Administrators, to provide information and training relevant to small drinking water systems. This meeting was an extension of EPA's Annual Drinking Water Workshop, and the first designed to bring together EPA and regional experts to focus on small systems challenges that states in the region are facing. This meeting helped attendees understand issues faced by small drinking water systems in these states. In September 2019, EPA held its [HYPERLINK "https://www.epa.gov/water-research/16th-annual-epa-drinking-water-workshop"] with more than 500 participants. This workshop included sessions on lead corrosion, a keynote on lead, and breakout sessions on corrosion and lead in schools.

Challenges

EPA uses challenges and competitions to help address EPA priorities. EPA has launched nearly 40 Challenges that have resulted in development and use of innovative solutions and strategies with measurable results. EPA has launched challenges focused on technology-development and market-stimulation, software and algorithm development and communication.

Challenges that were launched or completed in 2019 include:

1. See a Bloom, Give It Room' High School Video Challenge: High school students from states and tribes located in Region 7 and 8 create videos that promote public awareness of harmful algal blooms through creative filmmaking.
2. Nutrient Sensor Action Challenge: In August 2019, three winning teams demonstrated how data from low cost water quality monitoring sensors can be used to inform local-scale nutrient management decisions.
    a. "Direct Data for Farm Nutrient Management" by the League of Women Voters of Illinois (Jo Daviess County, Ill.): The team demonstrated how an edge-of-field sensor system could support farmers in reducing nitrogen loss from their fields. The installed sensors provide real-time data to inform management decisions at the farm-scale.
    b. "In-Plant Sensors for Nutrient Management" by the South Platte Water Renewal Partners (Englewood, Colo.): This facility is using sensor data to optimize wastewater treatment to meet more stringent nitrogen standards and improve watershed health.
    c. "Impact of Dam Removals on Nitrate Retention" by the University of New Hampshire (Durham, N.H.): The team deployed low-cost nutrient sensors to assess amount and timing of nitrate loading associated with dams.
3. Campus Rainworks Challenge: This annual challenge recognizes university students that create innovative designs for green infrastructure projects on campus.
4. Advanced Septic System Nitrogen Sensor Challenge: With extensive state and local partners participation, the challenge creates incentives and a market for low cost sensors capable of monitoring nitrogen concentration in home wastewater treatment systems.

Additional challenges to help address agency priorities are under development and planned to be launched in 2020. New challenges include efforts to address enhanced efficiency fertilizers, food waste, risk communication, and ocean plastics.

PFAS

Aggressively addressing is an active and ongoing effort for the agency. In February, the agency releases the Per- and Polyfluoroalkyl (PFAS) Action Plan. It is the first multi-media, multi-program, national research, management, and risk communication plan to address an emerging contaminant like PFAS. The plan responds to the extensive public input the agency received during the PFAS National Leadership Summit, community engagement events, and through the public docket. The PFAS Action Plan outlines the tools EPA is developing to assist states, tribes, and communities in addressing PFAS.

"The PFAS Action Plan is the most comprehensive cross-agency plan to address an emerging chemical of concern ever undertaken by EPA," said EPA Acting Administrator Andrew Wheeler. "For the first time in Agency history, we utilized all of our program offices to construct an all-encompassing plan to help states and local communities address PFAS and protect our nation's drinking water. We are moving forward with several important actions, including the maximum contaminant level process, that will help affected communities better monitor, detect, and address PFAS."

PFAS are a large group of man-made chemicals used in consumer products and industrial processes. In use since the 1940s, PFAS are resistant to heat, oils, stains, grease, and water—properties which contribute to their persistence in the environment.

The Action Plan describes long- and short-term actions that the EPA is taking including:

- Drinking water: EPA is moving forward with the maximum contaminant level (MCL) process outlined in the Safe Drinking Water Act for PFOA and PFOS—two of the most well-known and prevalent PFAS chemicals. By the end of this year, EPA will propose a regulatory determination, which is the next step in the Safe Drinking Water Act process for establishing an MCL.
- Clean up: EPA has already begun the regulatory development process for listing PFOA and PFOS as hazardous substances and will issue interim groundwater cleanup recommendations for sites contaminated with PFOA and PFOS. This important work will provide additional tools to help states and communities address existing contamination and enhance the ability to hold responsible parties accountable.
- Enforcement: EPA will use available enforcement tools to address PFAS exposure in the environment and assist states in enforcement activities.
- Monitoring: EPA will propose to include PFAS in nationwide drinking water monitoring under the next Unregulated Contaminant Monitoring Program. The agency will also consider PFAS chemicals for listing in the Toxics Release Inventory to help the agency identify where these chemicals are being released.
- Research: EPA will develop new analytical methods so that more PFAS chemicals can be detected in drinking water, in soil, and in groundwater. These efforts will improve our ability to monitor and assess potential risks. EPA's research efforts also include developing new technologies and treatment options to remove PFAS from drinking water at contaminated sites.
- Risk Communications: EPA will work across the agency—and the federal government—to develop a PFAS risk communication toolbox that includes materials that states, tribes, and local partners can use to effectively communicate with the public.

Together, these efforts will help EPA and its partners identify and better understand PFAS contaminants generally, clean up current PFAS contamination, prevent future contamination, and effectively communicate risk with the public. To implement the Action Plan, EPA will continue to work in close coordination with multiple entities, including other federal agencies, states, tribes, local governments, water utilities, industry, and the public.

Here are some highlights:

Drinking Water

- Just last month, EPA sent he proposed regulatory determination under the Safe Drinking Water Act for perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) in drinking water to the Office of Management and Budget for interagency review. The action will provide proposed determinations for at least five contaminants listed on the fourth Contaminant Candidate List, including PFOA and PFOS, in compliance with Safe Drinking Water Act requirements. Once interagency review is complete, it will be issued for public comment shortly thereafter. The agency is also gathering and evaluating information to determine if regulation is appropriate for other chemicals in the PFAS family.

- Also in December, EPA validated a new test method to identify addition PFAS compounds in drinking water. To date, EPA has established reliable testing methods to identify 29 PFAS compounds in drinking water, and provided this information to states and local public health agencies.
- To date, the agency has also established reliable treatment methods to remove 20 PFAS compounds from drinking water, and shared this information with state and local health officials.

Cleanup

- EPA is currently providing cleanup assistance to 32 states and the District of Columbia to address PFAS contamination.
- In addition to ongoing cleanup assistance, EPA issued Interim Recommendations for Addressing Groundwater Contaminated with Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonate (PFOS) under federal cleanup programs in December. This guidance This helps states, tribes, and other federal partners by setting a "preliminary remediation goal" of 70 ppt for PFOA and PFOS when those substances are found in groundwater at certain sites.
- "Today, we are delivering on one of our most important commitments under the PFAS Action Plan," said EPA Administrator Andrew Wheeler. "The interim recommendations will provide clear and consistent guidance for federal cleanup programs and will help protect drinking water resources in communities across the country. This is a critical tool for our state, tribal, and local partners to use to protect public health and address these chemicals."
- The EPA has also initiated the regulatory development process for listing certain PFAS as hazardous substances and expects to publish a Notice of Proposed Rulemaking in the next several months.

Developing Health and Toxicological Information about PFAS

- In the new year, EPA expects to finalize two toxicity assessments (GenX and PFBS), and release 5 draft toxicity assessments for public comment (PFDA, PFBA, PFHxA, PFNA, and PFHxS).

Building an Accurate Inventory of PFAS Contamination and Uses in Commerce

- Many large industrial users of PFAS have moved away from PFOA and PFOS, but may be using more novel forms of PFAS. To address this, EPA submitted a proposed significant new use rule (SNUR) for long-chain PFAS chemicals to OMB in September. Following interagency review, the SNUR will be released for public comment. A SNUR would ensure EPA is notified before any new manufacture, use, or importation of long-chain PFAS chemicals occurs in the U.S.
- In November, EPA also released an Advanced Notice of Proposed Rulemaking to add PFAS to the Toxics Release Inventory (TRI), which will ensure that industrial and federal facilities report information about PFAS releases publicly.
- "EPA continues to show critical leadership on addressing PFAS as we aggressively implement our PFAS Action Plan—the most comprehensive cross-agency plan to address an emerging chemical ever taken by EPA," said EPA Administrator Andrew Wheeler. "I started at the agency as a career employee in the TRI program and exploring the addition of certain PFAS chemicals to the TRI is an important step that can enhance this tool and provide important information to the public on these chemicals for the first time."
- In Summer 2019, EPA initiated stakeholder engagement in preparation for the 2020 proposal of nationwide drinking water monitoring for certain PFAS chemicals under the next Unregulated Contaminant Monitoring Rule (UCMR) monitoring cycle.

Grants & Awards

- In May, EPA awarded approximately $3.9 million through two grants for research that improves understanding of human and ecological exposure to per– and polyfluoroalkyl substances (PFAS) in the environment. This research is expected to help provide additional information about PFAS to federal, state, tribal, and local officials, as they work together to address these chemicals and protect public health. The research will also promote a greater awareness of how to restore water quality in PFAS-impacted communities.
    - Colorado School of Mines, Golden, Colorado, to research the fate, transport, bioaccumulation, and exposure of a diverse suite of PFAS in nationally representative PFAS impacted communities.
    - Oregon State University, Corvallis, Oregon, to study the toxicity of a large collection of PFAS and PFAS mixtures with the zebrafish assay and mice studies to identify toxic PFAS that require prioritization for risk management.
- EPA also awarded nearly $6 million to eight recipients to fund research by eight organizations to expand the understanding of the environmental risks posed by per- and poly-fluoroalkyl substances (PFAS) in waste streams and identify practical approaches to manage the potential impacts as PFAS enters the environment.
    - New York State Department of Health - Health Research Inc., Menands, N.Y. – to build a dataset by analyzing samples from approximately 150 landfills in the State of New York. This data will be used to understand the types and concentrations of PFAS that are found in and around landfills, as well as the key landfill attributes that contribute to release of PFAS.
    - North Carolina State University, Raleigh, N.C. – to collect landfill gas (LFG) samples from over 400 landfills across the U.S. to determine if PFAS from LFG is a significant source of PFAS released into the atmosphere.
    - University of Florida, Gainsville, Fla. – to study the role of waste type, management strategies, and treatment methods on the occurrence, source and fate of PFAS in landfills. The study will identify the sources of PFAS compounds in the current US domestic waste stream using laboratory-scale batch leaching, and landfill simulation studies.
    - Clemson University, Clemson, S.C. – to examine the chemical process for the destruction of PFAS in leachate and groundwater. This project will assess degradation kinetics, test hypothesized process modifications, and conduct trials of leachate treatment.
    - Purdue University, West Lafayette, Ind. – to develop methods to decrease PFAS concentrations in both municipal wastewater treatment plant effluent and sludge. The study will determine the technical and economic feasibility of using a treatment approach consisting of nanofiltration followed by electrochemical oxidation.
    - Texas A&M AgriLife Research, College Station, Texas – to investigate the feasibility of electron beam technology for the destruction of PFAS compounds during the remediation of groundwater, wastewater, sewage sludges, and soils.
    - Texas Tech University, Lubbock, Texas – to identify and quantify the occurrence of PFAS in landfill leachate, investigate the fate of PFAS passing through typical landfill liner systems, and test the ability to break down PFAS in landfill leachate using soundwaves.
    - University of North Dakota, Grand Forks, N.D. – to develop practical strategies for removing legacy and emerging PFAS from leachate and groundwater by studying the adsorption, desorption, and biodegradation of PFAS and precursor compounds in landfills.
- In November, EPA announced the availability of nearly $5 million for new research on PFAS in agriculture. In a February 2019 memorandum, EPA Administrator Andrew Wheeler called for the

agency to prioritize new federal research that will help farmers, ranchers, and rural communities by generating new scientifically-driven information on PFAS, potential PFAS impacts in agricultural settings, and actions people can take to address PFAS in their communities.

- "EPA is following through on our commitment under the PFAS Action Plan and the memo to close the gaps in the science around PFAS as quickly as possible by supporting cutting-edge research that will help manage PFAS issues in agricultural and rural economies," said EPA Administrator Andrew Wheeler. "We want to make sure that decision makers at the federal, state, and local levels have the best science available to make informed decisions. These new research grants will help identify potential impacts of PFAS to farms, ranches and rural communities."
- "While our scientific understanding of PFAS continues to develop, the people of New Mexico, especially farmers and ranchers, already know how it can affect the water resources that are so critical to the state's environmental and economic wellbeing," said Regional Administrator Ken McQueen. "With this funding, EPA is committing to finding solutions to the challenges PFAS presents and bringing relief to rural communities."
- "EPA is uniquely suited to lead and promote research on this important topic and USDA applauds EPA's focus on farmers, ranchers, and rural communities. EPA's funding of this research complements the work USDA does supporting U.S. production agriculture and ensuring a safe food supply," said USDA Deputy Under Secretary for Research, Education, and Economics Dr. Scott Hutchins.
- "NASDA appreciates the EPA's efforts to prioritize PFAS research that will help the agricultural community. As the primary stewards for the agricultural industries in their states, NASDA members will continue to work closely with the EPA as the agency implements its PFAS Action Plan. Together, we can ensure healthy communities and farms across America," said National Association of State Departments of Agriculture (NASDA) CEO Dr. Barbara P. Glenn.

In 2019, EPA reaffirmed its commitment to protecting children's environmental health. This past October, EPA celebrated Children's Health Month. Throughout the month, EPA officials at headquarters and all 10 regions hosted on-the-ground events highlighting the importance of protecting children's health.

"I am proud of the work we continue to accomplish to protect children's health across the country," **said EPA Administrator Andrew Wheeler.** "From proposing the first revisions to the lead and copper rule in nearly three decades to announcing $10 million in funding to replace old school buses, the Trump Administration is making tremendous progress toward protecting the most vulnerable among us from environmental hazards."

Key actions and accomplishments from 2019 include:

- **Partnership to Reduce Childhood Lead Exposures:** EPA signed a new Memorandum of Understanding (MOU) that provides a framework for a coordinated approach between more than a dozen critical partners across the federal government, tribes, water utilities and the public health community. The commitments of the MOU support the *Lead Action Plan*, which provides a blueprint for reducing lead exposure and associated harms by working with a range of stakeholders, including states, tribes and local communities, along with businesses, property owners and parents.

  One existing effort that is further supported by this MOU is EPA's 3Ts - training, testing and taking action - for Reducing Lead in Drinking Water in School and Child Care Facilities.

- **DERA Grants:** School buses travel over 4 billion miles each year, providing the safest transportation to and from school for more than 25 million American children every day. However, exhaust from diesel buses can harm health, especially in children, who have a faster breathing rate than adults and whose lungs are not yet fully developed. EPA has implemented standards to make newer diesel engines more than 90% cleaner, but many older diesel school buses are still operating.

  In May, EPA awarded more than 49.3 million to replace 473 older diesel school buses in 145 school bus fleets in 43 states or territories. Just last month, EPA announced the availability of $44 million grant funding to implement projects aimed at reducing emissions from the nation's existing fleet of older diesel engines. These rebates for public school bus fleet owners help replace older school buses with cleaner, more efficient models.

  This past Summer, EPA published its 4th DERA Report to Congress, summarizing the accomplishments of the program between 2008 and 2016. During those years, EPA awarded a total of $629 million to clean up 67,300 diesel engines. The emission reductions resulted in up to $19 billion in health benefits and up to 2,300 fewer premature deaths.

- **Outreach to Local Houses of Worship:** In October, Administrator Wheeler hosted a call with community faith leaders and released *Supporting Healthy Houses of Worship: Effective, Affordable Measures to Protect the Health of Congregations and Staff booklet.* This booklet is designed to provide places of worship with information on actions they can take to reduce environmental health risks, with a special emphasis on children's health, as children are particularly vulnerable to many environmental risks.

- **Children's Environmental Health Symposium:** In June, EPA joined Texas Tech University Health Science Center and the Louisiana Department of Health in hosting a symposium on Children's Environmental Health in New Orleans. EPA program experts, children's health providers and local health leaders held talks and workshops on a variety of topics, such as avoiding and testing for lead exposure, addressing pests and pesticide use in schools and childcare settings, and environmental justice issues. These discussions emphasized the symposium's objectives of helping participants recognize the continuing threat of lead poisoning to children, regardless of socioeconomic level; identify emerging threats to children's health; and identify triggers and preventive methods for environmental illnesses such as asthma.

Excerpt from AAW speech at the Mid-Atlantic Lead Forum kicking off Children's Health Month

"The first – and most fundamental – responsibility of government is to protect the people, especially the most vulnerable among us. All Americans – regardless of their age, race, income, or home address – deserve an opportunity to live in safe and healthy environments. And we know that children are especially vulnerable to the potential health effects of many hazards, including lead, which can severely and permanently impact their health and development. It is critical that our decisions and actions protect children's health and their future.

...

We know that we can't be on the ground in every community, but with our strong federal, state, tribal, and local partnerships we know that our joint efforts will ensure that the needs of the most vulnerable are met and public health is protected. This is a philosophy we are working to instill across the Agency. We want to ensure we are reaching and helping those most in need."

Public Engagement & Environmental Education
In 2019, the EPA awarded **36** environmental education regional grants in **25** states for a total of **$3,253,920.**

Through the EPA's teacher training cooperative agreement with the North American Association of Environmental Education, EPA conducted **over 200 workshops, training, and webinars**, reaching over **18,000 teachers, community members, and other environmental education professionals.** The work of these individuals in schools, with after-school programs, in communities, and with the general public, helped bring environmental education programming and materials to over **2.8 million U.S. citizens**.

Presidential Environmental Awards
In July 2019, the White House Council of Environmental Quality Chairman Mary Neumayr joined Administrator Wheeler in celebrating 200 award-winning students, educators, and honorable mention recipients at the Presidential Environmental Awards Ceremony, with over 150 guests. From across the country, students and educators were recognized for their remarkable efforts that promote environmental education and stewardship.

"The Presidential Environmental Education Awards Ceremony is a day I look forward to each year because it is a time when we honor some of the best and brightest in environmental education and stewardship," **said EPA Administrator Andrew Wheeler.** "This year, CEQ Chairman Mary Neumayr joined me in celebrating our 200 student and teacher winners who represent excellence in environmental protection. Congratulations and thank you to all our winners for their dedication to protecting human health and the environment."

"It was a pleasure to join Administrator Wheeler today as we recognized the achievements of students and teachers from across the country who are promoting environmental stewardship and furthering environmental education in their communities and schools," **said CEQ Chairman Neumayr.** "These students are our nation's next generation of leaders and are doing outstanding work."

Partnerships
Agriculture
In 2019, EPA followed through on its commitment to listen to the needs of America's farmers. Over the past year, the agency welcomed over 650 farmers, ranchers, and rural stakeholders to EPA Headquarters for events, meetings, fly-ins, and awards ceremonies.

In 2019, Administrator Wheeler and EPA took over 20 meaningful actions to meet the environmental needs of U.S. agriculture, including: completing various pesticide registrations and reregistration steps — including first-time registrations for pesticide use on hemp in 2020, repealing and moving to replace the 2015 Waters of the U.S. Rule, instating year-round E-15, exempting air emissions from farm animal waste from reporting under EPCRA, moving to strengthen Worker Protection Standards specifically Application Exclusion Zones for agriculture, reauthorizing use of sodium cyanide for predator control for western U.S. farmers and ranchers, promoting market-based approaches for managing nutrient including trading, developing a national water reuse action plan, supporting agricultural grants through

EPA's Gulf of Mexico Program, signing various collaborative agreements with FDA, USDA and NGOs on ways to help reduce food waste, and securing a Presidential Proclamation designating April as "Winning on Reducing Food Waste Month," among many other actions.

Additionally, Administrator Wheeler listened to state departments of agriculture and recognized the need among U.S. agriculture for better information on managing per- and polyfluoroalkyl (PFAS) substances in rural settings. He subsequently announced the availability of $4.8 million in funding to expand research on managing PFAS in agricultural and rural America.

National FFA
In February, Administrator Wheeler signed a first-time Memorandum of Understanding with National FFA, which has over 700,000 student members throughout its 8,612 chapters in all 50 states, Puerto Rico and the Virgin Islands. The MOU facilitates internship opportunities, connections between EPA Regional Offices and National FFA Chapters, and furthering outreach on EPA's environmental education efforts to rural areas.

Call for New Members for the Farm, Ranch, and Rural Communities Federal Advisory Board
In November, EPA announced a solicitation for member nominations for the Farm, Ranch, and Rural Communities Federal Advisory Committee (FRRCC). In 2020, EPA will appoint 20-30 new members to the FRRCC and seek their input on a variety of agricultural topics.

American Conservation Coalition
In April, U.S. Environmental Protection Agency (EPA) Administrator Andrew Wheeler signed a first-time Memorandum of Understanding (MOU) with the American Conservation Coalition (ACC) to attract, educate, inspire and prepare students for careers and opportunities in environmental career fields.

"Today's MOU with the American Conservation Coalition will help educate and encourage more students to get involved in important environmental issues like combatting marine litter, improving recycling, and reducing lead exposure," **said EPA Administrator Andrew Wheeler.** "EPA is proud to work alongside ACC to inspire the next generation of environmental leaders and advance solutions to today's pressing environmental challenges."

"ACC is delighted to be working with the EPA on important projects to improve our environment," **said Benji Backer, American Conservation Coalition President.** "Environmental progress is important no matter where it comes from, and the EPA plays a vital role in protecting our environment. Administrator Wheeler and his team will be important allies for the environmental movement going forward."

In the Courts
This year, EPA's Office of General Counsel continued to support the Trump Administration's environmental goals by delivering the following major wins in court:

1. **Challenge to EPA's 2018 Definition of Solid Waste Rule under the Resource Conservation and Recovery Act (*California Communities Against Toxics v. EPA*, No. 18-1163 (D.C. Cir. July 2, 2019)).**

In *California Communities Against Toxics v. EPA*, challengers sought review of EPA's 2018 Definition of Solid Waste Rule treating material transferred from a waste generator to a third-party reclaimer as legitimately recycled, rather than "discarded" under RCRA. The court ruled that EPA did not act contrary

to RCRA and that EPA provided a reasoned explanation for applying different standards to materials that are not yet part of the waste disposal problem where they meet conditions EPA concluded were adequate for safe transfer and legitimate recycling.

This decision helps to provide regulatory certainty and promote legitimate recycling of hazardous secondary materials, which benefits both business and the environment. Encouraging legitimate recycling will help to reduce waste and conserve natural resources.

2. **Major MACT to Area (MM2A)/Once-in-always-in (OIAI) Litigation. *California Communities Against Toxics v. EPA,* No. 18-1085 (D.C. Cir. Aug. 20, 2019).**

In *California Communities Against Toxics v. EPA*, No. 18-1085 (D.C. Cir. Aug. 20, 2019), the D.C. Circuit dismissed a challenge to EPA's January 2018 guidance memorandum that withdrew the 1995 "once-in-always-in" policy and explained that the plain language of the CAA compelled the conclusion that a major source can be reclassified as an area source at any time that it takes an enforceable limit on its potential to emit below the major source thresholds. The court dismissed the challenge for lack of jurisdiction on the grounds that the January 2018 memorandum was not final agency action.

The court's dismissal of this challenge to the 2018 guidance memorandum is significant because withdrawing the "once-in-always-in" policy will help to reduce regulatory burdens that could deter sources from decreasing their hazardous air pollution emissions.

3. **Challenges to EPA's approval of Louisiana's regional haze state implementation plan (SIP) submitted to EPA under the Clean Air Act. *Sierra Club v. EPA*, No. 18-60116 (5th Cir. Oct.3, 2019).**

In October, EPA prevailed in a case involving challenges to EPA's approval of Louisiana's regional haze state implementation plan submitted under the Clean Air Act. In S*ierra Club v. EPA*, No. 18-60116 (5th Cir. Oct. 3, 2019), petitions were filed for review of EPA's approval of Louisiana's SIP for controlling regional haze. Ultimately, the court denied the petitions, noting in part that it affords "significant deference" to agency decisions involving analysis of scientific data within the agency's technical expertise.

This case, which involved challenges by both regulated facilities and environmental groups, raises important questions related to cooperative federalism, fundamental elements of SIP law, and deference to EPA's modeling expertise.

4. **Clean Water Act case: *Blue Water Baltimore v. Wheeler,* No. 16-452 (D.D.C. Dec. 2, 2019).**

In *Blue Water Baltimore v. Wheeler*, No. 16-452 (D.D.C. Dec. 2, 2019), several groups challenged EPA's approval of the Clean Water Act 303(d) Lists that Maryland submitted to EPA. The challengers argued that EPA's approval was arbitrary and capricious. The court rejected the challengers' argument, ruling that Maryland and EPA had properly identified the Chesapeake Bay total maximum daily load (TMDL) as a valid basis for not listing the segments.

Working collaboratively with states, local government, and tribes to implement laws that protect human health and the environment is one of EPA's highest priorities. This case demonstrates the shared accountability that exists between EPA and the states.

5. **Clean Water Act decision issued by the Fifth Circuit in *Center for Biological Diversity et al. v. EPA*, No. 18-60102 (5th Cir. Aug. 30, 2019).**

In *Center for Biological Diversity et al. v. EPA*, No. 18-60102 (5th Cir. Aug. 30, 2019), environmental groups (Petitioners) filed a petition for review of the general permit for various oil and gas operations located in the Central to Western portions of the Gulf of Mexico, alleging that EPA violated that National Environmental Policy Act and the Clean Water Act. On August 30, 2019, the Fifth Circuit issued a unanimous opinion dismissing the petition in its entirety on grounds that the Petitioners lacked standing. The court noted, among other things, that the Petitioners did not sufficiently tie their interest in the Gulf to the specific locations where discharge would occur. This decision is important in that the court recognized that standing is not just an "empty formality."

Freedom of Information Act:

This year, the National FOIA Office (NFO):

- Led EPA to significantly reduce its FOIA backlog.
- Finalized an updated FOIA regulation that brings the Agency into compliance with a series of Congressional amendments.
- Led Agency-wide Reform of FOIA Processing & Organizational Structure, which will allow EPA to minimize coordination required for initial assignment of FOIA requests and to ensure consistency in early outreach to requesters.

External Civil Rights Compliance Office:

In FY 2019, OGC's External Civil Rights Compliance Office (ECRCO) made significant strides in achieving its external civil rights mission. As an example, by December 2018, ECRCO had completely cleared its docket of overdue jurisdictional decisions and as of November 2019, ECRCO has resolved all overaged complaints that required preliminary findings.

Agency Reform & Process Improvements

In 2019, EPA used a Lean Management System (ELMS) to promote continuous improvement. Those tools allowed the agency to increase efficiency in several areas:

- *Permit streamlining*: In 2018, EPA set a goal to reduce the number of backlogged applications for new permits by 50% by the end of September 2019. In 2019, EPA exceeded that goal by reducing the backlog by 68%. In addition, in 2019, EPA launched a comprehensive electronic system to track the status of pending applications for new permits.
- *Timely responses to environmental justice inquiries:* In 2018, EPA set a goal to improve the agency's response time to Environmental Justice Hotline inquiries by 93%. In 2019, EPA exceeded that goal by responding to more than 700 public inquiries received within 20 days or less 97% of the time.
- *NEPA:* In 2018, EPA employed Lean principles and collaborative problem-solving practices to improve the efficiency of the filing process for Environmental Impact Statements (EIS) prepared by federal agencies. In 2019, EPA reduced the lag time between the filing of Notices of Availability and the document publication by 40 percent. EPA also increased early engagement with federal agencies on EISs by 85 percent. EIS Federal Register Notice filing process.

Smart Sectors

EPA's Smart Sectors program provides a platform to collaborate with regulated sectors and develop sensible approaches that better protect the environment and public health. The goals include: meaningful collaboration with regulated sectors; common-sense policies to improve environmental outcomes; and better EPA practices and streamlined operations.

In 2019, EPA strengthened and expanded external engagement via the Smart Sectors program through the launch of Smart Sectors programs in all ten regions. In 2018, Smart Sectors programs were initially launched in Regions 1 and 8. By the end of 2019, all ten regions had launched Smart Sectors programs with events which covered a variety of sectors including agriculture, forestry, mining, oil and gas, cement and concrete.

Small Business

This past year, EPA remained resolute in advancing the interests of small businesses while protecting human health and the environment. In 2019, EPA hosted an Associate Deputy Administrator Small Business Roundtable for senior leaders to discuss regulatory and environmental compliance issues with small business trade associations.

EPA has done an excellent job in affording small business contracting opportunities and continues to be a leader among all federal agencies. On the small business contracting front, June 25, 2019 EPA earned its tenth consecutive "A" on the Small Business Procurement Scorecard administered by the U.S. Small Business Administration (SBA). The SBA awarded EPA the coveted Certificate of Recognition for being one of only a handful of agencies to receive that distinction. The Federal Procurement Data System shows that in FY 2019 EPA awarded 42 percent of its total prime contracting dollars to small business. That amount exceeds the government-wide statutory goal by almost 20 percent. In fact, in 2019 EPA awarded contracts to some 872 small businesses, totaling over $647 Million.

EPA's FY 2020 small business prime contracting goal is 35 percent. This means that at least 35 percent of EPA's total FY 2020 contracting dollars should be targeted for small businesses, including the four statutorily-designated subcategories of small businesses, consisting of small disadvantaged businesses, women-owned small businesses, service-disabled veteran-owned small businesses, and small businesses located in Historically Underutilized Business Zones. Achieving this new goal is important to supporting the vital role of small businesses in fueling our nation's economy.

2019 Regions Accomplishments

Region 1

New Bedford Harbor Cleanup: In 2019, EPA Region 1 achieved a significant milestone in the cleanup of New Bedford Harbor Superfund Site in southeastern Massachusetts. In September, EPA wrapped up 15 years of dredging, hydraulic transport, and shipment of over 600,000 cubic yards of highly PCB-contaminated dewatered subtidal sediment from the Administrators Redevelopment Priority List site. Intertidal cleanup and other work will continue at the site, as will work on a state-led project along the harbor waterfront (at the North Terminal), which is redeveloping an adjacent parcel to support the construction of a new Massachusetts Clean Energy Center to serve as shoreside support for offshore wind energy projects.

Revitalizing Old Mills and Creating Jobs: As the birthplace of the U.S. industrial revolution, New England is home to many historic mills and mill sites in need of revitalization.

1. At the 100-acre former Expera paper mill (which closed in 2015), Region 1 worked with Maine Department of Environmental Protection and the city to assess the extent of contamination and

determine cleanup strategies. By the summer of 2019, a new owner – Nine Dragons Paper – had invested $50 million in site improvements and remediation, and restarted operations creating 130 jobs.

2. In Bucksport, Maine, a $280,000 grant from the EPA provided the technical support needed to transform the old paper mill into a $250 million aquaculture facility creating an estimated 250 new jobs.
3. Leveraging sustainable materials management expertise, the region maximized recycling and re-use of the demolition debris from a 45,000 sq. ft. former Vermont mill, resulting in the generation of only 4 dumpsters of landfill waste.

Taking Action on Lead

Reducing lead exposure and addressing associated health impacts in a top priority for the agency and Region 1, especially in vulnerable populations and at facilities like schools and child care centers. In 2019, Region 1 awarded more than $5 million to our state partners and nonprofits to address lead exposure issues in drinking water, soils, and lead paint.

The region hosted outreach events that allowed residents to bring soil samples to EPA's mobile lab for lead screening, hosted a "Get the Lead Out Summit" focused on creative strategies for removing lead drinking water, lines and produced an informational video detailing the lead line replacement efforts of Claremont, NH and North Providence, RI.

The region also partnered with New Hampshire to launch an online tool ("Protect Your Tap: a 10-minute lead test") allowing homeowners to find local lead pipes and reduce potential lead risk in drinking water.

Finally, in 2019, the region focused much of our Lead Renovation, Repair, and Painting (RRP) outreach in Vermont communities; this 6-month targeted education, training, and compliance initiative resulted in:

- 1,300 child care centers in Vermont received technical assistance from the region to identify risks of lead exposure from drinking water, dust from lead-based paint, and lead-contaminated soil.
- 277 newly RRP-certified renovation firms and contractors in Vermont.

Clean Water Infrastructure. Under the Water Infrastructure Finance and Innovation Act (WIFIA) program, $269 million dollars were granted in 2019 to the Narragansett Bay Commission in Rhode Island. These funds, matched by the grantee, will help support the Combined Sewer Overflow (CSO) Phase IIIA Facilities project. The project includes a long deep rock tunnel, two work shafts, four drop shafts, a tunnel pump station and several improvements to the wastewater collection system. This vital infrastructure work will create an estimated 1,700 jobs and save the water district ratepayers close to $100 million in typical bond financing costs.

Region 2

[Sidebar] Spotlight on U.S. Virgin Islands

As part of its continuing efforts to help the Caribbean recover from the long-term impacts from Hurricanes Irma and Maria, EPA proposed to approve the U.S. Virgin Islands (USVI) municipal solid waste landfill permit program. This proposed approval is a key step for the territory to, among other things, be able to expand existing landfills, construct new landfills, and allow the use of alternative daily cover and other operational flexibilities at the landfills.

EPA is continuing to assess landfills throughout the Virgin Islands and Puerto Rico. Working with our federal, territorial, community and education partners, EPA has convened stakeholders, facilitated dialogue, provided technical resources and supplied key information to empower local decision-makers to move ahead with a solid waste management program for the Caribbean. To support these efforts as part of USVI recovery, $10 million in supplemental funds have been allocated to the territory.

"This approval would be a critical element in a comprehensive and robust solid waste management program which is an EPA priority. We are engaged in a broad effort of capacity building, equipping our partners, reducing waste, increasing recycling, and promoting a comprehensive solid waste management program," **said EPA Regional Administrator Pete Lopez.**

Tonawanda Coke Corporation Clean-up:
EPA continued its work to address serious contamination at the Tonawanda Coke Corporation site in western New York State. EPA actions prevented a large-scale release of hazardous waste and mitigated the potential for fire and explosions which would have been devastating to the surrounding residential community and other industrial facilities nearby, as well as preventing any releases into the Niagara River which borders the site.

Newark Drinking Water
Protecting public health, especially the health of our families and children, is one of EPA's top priorities. Since July 2019, EPA has been coordinating closely with the City of Newark and the New Jersey Department of Environmental Protection (NJDEP) to determine if drinking water filters provided by Newark are reducing lead in tap water to levels of 10 ppb or below, under the current conditions in Newark, when the filters are properly installed and maintained. EPA is pleased that the collaborative work conducted by our agencies was able to provide valuable information that a combination of flushing and filtering in Newark is the appropriate approach for reduction of lead levels in tap water in the Pequannock service area until the corrosion control treatment is optimized. EPA is strongly committed to continuing its long-standing and close collaboration with Newark and NJDEP to strengthen the city's capacity to ensure that Newark area residents can continue to receive clean and safe drinking water.

Region 3
Advancing Redevelopment
EPA's Mid-Atlantic Region continues to advance the redevelopment of formerly contaminated properties. In 2019, communities reported Brownfields redevelopment on sites that created more than 300 jobs and leveraged more than $124 million in private investment. For example, the Business Development Corporation of the Northern Panhandle- Pietro Fiorentini opened the Three Springs Business Park in Weirton, West Virginia. The business park has leveraged $4.4 million in other public investments, $21 million in private investments for manufacturing, and $10 million in commercial and hospitality. The Business Park has created 195 jobs and preserved 141 jobs, while 651 new jobs are projected.

"The local impact from the jobs the business park will create will be enormous," **said Business Development Corporation of the Northern Panhandle Executive Director Patrick Ford.**

EPA Administrator Andrew Wheeler, Senator Shelley Moore Capito, and Representative Carol Miller (WV-03) tour the Shaffer Equipment/Arbuckle Creek Area Site in Minden, West Virginia, before announcing the Site as one of six sites in the nation added to the NPL in May 2019. Since then, EPA's Mid-Atlantic Region has conducted several public availability sessions, updated the community through fact sheets, initiated a Removal Action to remediate an area of contaminated soil, completed repairs to a previously constructed remedy, and commenced Remedial Investigation fieldwork.

Enhanced Outreach to Agriculture Community

In 2019, EPA Regional Administrator Cosmo Servidio made a concerted effort to enhance outreach to the agriculture community to hear from farmers about the successes and challenges to producing food and having a clean environment, and to find ways to work effectively together.

In 2019, the Region reached out to over 1,400 members of the agricultural community through farmer roundtables, educational farm tours, field days, and meetings with leadership from agricultural organizations and federal/state agriculture agencies.

The Lancaster County (PA) Agriculture Roundtable is an example of that outreach. Hosted by PennAg Industries Association, the Regional Administrator and nine members of EPA's leadership team and agriculture staff toured a cage-free egg layer operation, a hog finisher operation, and a large dairy. These tours sparked productive conversations between EPA and producers on how best to work together to support farmers in managing manure and complying with regulatory programs.

EPA Region 3 "suited up" to tour an egg layer and hog finishing operation in Lancaster County, PA. Biosecurity protocols is critical to protecting animal health.

Response Support Provided to Fire, Explosion at Philadelphia Refinery

At approximately 4:00 am on Friday June 21, 2019, there was a release of harmful vapor in the Philadelphia Energy Solutions (PES) Refinery in southwest Philadelphia. The vapor found an ignition source, causing a fire and multiple explosions that threatened the air quality in the surrounding community.

EPA Mid-Atlantic Region's Preparedness & Response Branch played an important support role in responding to this incident by working closely with key staff within the PES Refinery site, Philadelphia's Office of Emergency Management, Air Management Services, and the Philadelphia Fire Department HazMat Unit. The Region's response effort with other participants demonstrated the vital importance of maintaining robust external partnerships in responding to this and any emergency.

Region 4

Accelerating Cleanup at Superfund Sites

Fairfax Street Wood Treaters: Six-months ahead of schedule, EPA Region 4 successfully accelerated cleanup efforts resulting in a $7.9 million remedy. This included the removal of over 50,000 tons of impacted soil and 300,000 gallons of water from over 50 residential properties. Region 4's Superfund and Emergency Management Division collaborative efforts with the Florida Department of Environmental Protection ensured the protection of public health for several neighborhoods near the Site and the remediation of the 12.5-acre wood treatment plant. In November 2019, Region 4 held a public availability session to highlight the success of the cleanup and to recognize the collaborative model utilized at the site. The site, targeted for deletion in FY20, is poised for redevelopment opportunities and the community boasts recent graduates of EPA's Superfund Job Training Initiative.

Trash-Free Waters: Alabama

The Gulf of Mexico Program funded the Mobile Bay National Estuary Program (MBNEP) to reduce the amount of stormwater-borne trash and litter by at least 4,800 pounds by installing prototype trash traps, or "Litter Gitters," at ten strategically located stormwater outfalls in the Three Mile Creek Watershed. MBNEP has utilized the Escaped Trash Assessment Protocol at each Litter Gitter site to

assess the condition of water quality and habitat and analyze constituent materials in collected trash and litter to determine weight, volume and probable sources.

Farmer to Farmer

Farmer to Farmer grants support projects to improve water quality, habitat and environmental education through farmer-led or farm-focused organizations in the upper and lower Mississippi River basins. Since 2018, EPA has awarded over $9.5 million to projects with a variety of partners to show nutrient reduction progress in the Mississippi-Atchafalaya River Basin. In 2019, the Gulf of Mexico Program awarded over $7.5 million to seven recipients in Arkansas, Florida, Iowa and Mississippi. The projects will center around innovative monitoring systems that will measure and report field scale water and nutrient dynamics to farmers in support of informed crop management decisions.

Brownfields

The Region 4 Brownfields program continues to lead the nation in several programmatic areas. Region 4's program exceeded the assessment national target of 100 with 410 assessments completed; the highest in the nation. Region 4 was also the first in the nation for returning land for beneficial reuse under the Ready for Anticipated Use program, exceeding the national target by 108.

Through successful collaborations, Region 4 communities leveraged over $561,000,000, leading the nation in the investment of resources for community revitalization. Notably, Region 4 has ranked first in the nation four out of the last five years under this metric, with over half a billion dollars a year in documented leveraging.

Food Recovery Efforts during Superbowl LIII

In February 2019, Region 4 partnered with a local nonprofit, Second Helpings Atlanta, to rescue over 17,000 pounds of high quality, healthy, nutritious food, which would have otherwise gone to a landfill, during Superbowl LIII in Atlanta, GA. Instead of landfill disposal, this food was provided to local community charities which provided over 14,000 meals to those in need.

Lab Support to States

Region 4 laboratory support is a critical tool available to states without the resources to maintain a robust and expanded analytical program. Region 4 proudly continues to refine our analytical methods and protocols in concert with evolving science. Specifically, in 2019, Region 4 conducted more than eight sampling projects in Alabama, Georgia, Mississippi and South Carolina and processed over 750 PFAS and EtO analyses in support of state activities.

Nouryon Functional Chemical Enforcement Settlement

Nouryon is a sulfuric acid plant in Axis, AL with nearly two decades of noncompliance which had resulted in increased emissions of sulfuric acid (SO_2) and sulfuric acid mist in violation of New Source Review provisions of the Clean Air Act. The Consent Decree, filed on September 11, 2019, requires Nouryon to spend approximately $9.2 million on compliance measures that will significantly reduce emissions at the facility. Installation of a peroxide scrubber and implementation of more stringent emission limits has resulted in the facility starting to achieve emissions reductions of 2,340 tons per year in SO_2 and 40 tons per year in sulfuric acid mist. Nouryon is also required to pay a $300,000 civil penalty, of which a portion went to the State of Alabama who joined EPA as a co-plaintiff, and spend $150,000 on an environmental mitigation project that will achieve additional emission reductions in the area. The SO_2 and sulfuric acid midst emission reductions from the settlement are the largest SO_2 reductions and the largest sulfuric acid mist reductions from a single Region 4 sulfuric acid NSR settlement.

Region 5

Great Lakes Restoration

- Funded 26 restoration projects across the basin totaling $6.9 million with non-federal investments totaling $8.1 million.
- Removed nine beneficial use impairments at five Areas of Concern in five states – putting them on the path to recovery and de-listing, and promoting revitalization in surrounding communities.
- Launched new Trash-Free Great Lakes grant program, making $2 million available for beach, shoreline and waterway cleanups throughout the basin.
- Provided $11.5 million in grant funding for 21 projects to reduce nutrients throughout the basin. In 2019, a new grant category was included: five innovative, market-based water-quality trading projects will receive funding totaling $2 million.

Superfund Success

- Region 5 deleted six sites from the NPL, completed remedy construction at 16 sites, and determined that 26 sites are now ready for reuse.
- Completed 50 emergency removals to address immediate threats to public health – exceeding target by 47 percent. Deployed staff to 36 emergency response sites involving hazardous waste or oil cleanups.

Cleaner Air

This year, EPA Region 5 completed five air quality re-designations – a third of the nation's total – and on track for an unprecedented 15 more areas to be re-designated in 2020. In August, Columbus, Ohio was the nation's first non-attainment area to meet the 2015 ozone air quality standard – delivering cleaner air for 4 million people. Now that Columbus has been re-designated, businesses will face fewer air permitting restrictions paving the way for infrastructure investment and economic development that will create jobs.

"Today is a very good day for everyone who lives and breathes in the greater Columbus area," **said EPA Region 5 Administrator Cathy Stepp. "**The Columbus success story is the direct result of the cooperative partnership between the U.S. EPA, the State of Ohio, the city, local government entities and industry to improve air quality which in turn spurs economic development and revitalization."

Region 6

Tar Creek Superfund Site, Ottawa County, Oklahoma

With funding assistance of over $9 million, the Oklahoma Department of Environmental Quality and the Quapaw Nation of Oklahoma removed approximately 568,000 tons and 1,007,018 tons, respectively, of toxic chat from the site on the Administrator's Emphasis List providing a healthier environment for the citizens of Northeastern Oklahoma. The cleanup furthers the commitment EPA made in the Federal Lead Action Plan by managing lead contamination at Superfund sites, thereby reducing exposure to community residents.

EPA also provided the Quapaw Nation $285,152 to relocate a family with a 3-year old child residing in Picher, Oklahoma. The family lived near an old lead smelter facility, and the child's blood levels tested high for lead. The relocation effectively removed the family from harmful exposures. EPA released the Site-wide Strategic Plan, which resulted in the first national conservation easement recorded on tribally-

owned property at a Superfund Site. To date, approximately $425 million has been spent on this clean-up.

Caminada Headland Back Barrier Marsh Creation Project:
EPA Region 6 successfully collaborated with Louisiana's state agency, Coastal Protection and Restoration Authority (CPRA) to obtain $39 million to combine two proposed projects in the vicinity of Port Fourchon to create and restore over 900 acres of back barrier intertidal marsh. This project supports a State constructed Beach/Dune project, provides a measure of resilience to nearby Port Fourchon. Port Fourchon is a key multi-use coastal port that functions primarily as a land base for multiple offshore oil & gas support service companies and is the nation's premier port for the continued support of oil and gas activities in the Gulf. Construction is scheduled to begin Summer 2020.

Cleanup & Development of the Former Evans-Fintube Site:
The Evans-Fintube in Tusla, Okla. was used as a steel foundry and forge from 1939 through 1962. The 23-acre property had a concrete reservoir, forge, welding, and fabrication shops. This blighted property which included asbestos, PCBs, lead, and soil and groundwater contamination was visible from City Hall and a constant reminder of the work that needed to be done. This property had long-term environmental and social impact on the environmental justice community of Greenwood Historic District.

For the past seven years, the brownfields team has been utilizing various grant instruments with the City of Tulsa to not only plan and assess, but also to clean up the old Evans-Fintube property for redevelopment. Two years ago, the BMX Corporation saw potential and expressed interest in the property for its USA Headquarters. On November 15, 2019, USA BMX held a groundbreaking ceremony and unveiled the final design for its world headquarters. EPA invested $950,000 in this property to receive anticipated leveraging of $23 million once the Headquarters is completed.

Plains/Encycle Facility Corpus Christi, TX
The final cleanup of the Plains/Encycle site in Corpus Christi, Texas has been achieved and the former zinc smelter and hazardous waste recycling facility bordering an environmental justice community has been redeveloped into a productive shipping dock and tank farm along the Corpus Christi ship channel. Approximately 20,000 tons of soil contaminated with heavy metals were removed. Over 50 industrial buildings at the site, many contaminated with asbestos and polychlorinated biphenyls (PCBs), were demolished with approximately 150,000 tons of debris generated and removed. The RCRA corrective action process which began in 2000 was completed in 2019 at a cost of approximately $20 million. This approximately 108-acre property on the banks of the Corpus Christi Ship Channel and adjacent to a high priority environmental justice community, Dona Park, has now been redeveloped as a crude oil storage tank farm and ship channel dock. Texas Council on Environmental Quality and EPA worked in partnership to ensure that the demolition and remediation did not impact the nearby Dona Park community, engaged often with the local community providing them many opportunities to review remediation plans and provide input into the cleanup process.

The completion of the cleanup activities and subsequent redevelopment at Plains/Encycle is a significant environmental milestone. One of state's most contaminated properties is now cleaned up, redeveloped and making a significant contribution to the Corpus Christi economy. The Port of Corpus Christi is currently the third largest U.S. port in total revenue tonnage, and now the new terminal has added a loading capacity of 50,000 barrels of crude oil per hour, four crude oil storage tanks with an aggregate capacity of approximately 1.4 million barrels and the capability to expand.

Region 7

Reducing Childhood Lead Exposure

In FY2019, Region 7 developed a strategic action plan to reduce childhood lead exposure across our programs. Air represents one of our region's broadest exposure pathways for lead, so it was with great satisfaction that the region designated one of our four lead non-attainment areas back to attainment as a result of air monitor data showing compliance with the National Ambient Air Quality Standards. This action signaled improved air quality for over 90,000 people living in the Council Bluffs, Iowa, area.

Region 7 also continues to grapple with the impact of lead mining, which spans almost two centuries. In this area, Region 7 made great strides using Superfund authority, remediating an estimated 1.205 million cubic yards of mine waste on 354 acres and 173,168 cubic yards of lead-contaminated soil at 746 residences across 11 Superfund sites. These milestones were achieved despite record spring rainfall, which hampered field work.

In addition to achievements for air and land, Region 7 focused outreach efforts on St. Joseph, Missouri, an urban community that exhibits nationally-significant elevated blood-lead levels. Our outreach efforts connected with over 55,000 people (or about 110 percent of our target and approximately 70 percent of the total St. Joseph population) to educate them on the risks of lead and what can be done to minimize exposure. In concert with this outreach, Region 7 leveraged enforcement authorities under TSCA's Renovation, Repair, and Painting Rule to create learning opportunities for our regulated community and their customers. Region 7 conducted 82 work-practice and records inspections in FY2019, exceeding an end-of-year goal of 80 by using the A3 process to overcome staff and time shortages attributable to attrition, shutdown, and weather.

Increasing Community Water System Compliance

Region 7's Public Water System Supervision team, working with counterparts in the Enforcement & Compliance Assurance Division and state program offices, have realized a major significant achievement this year: Region 7 is the only region reaching the national priority 25 percent reduction of community water systems with health-based violations (as compared to the third quarter 2017 baseline data). By the second quarter of 2019, Region 7 had reduced the number of community water systems with health-based violations to 188, as compared to 258 systems in the third quarter of 2017. Specific work was focused on the disinfection by-product violations, which represented the largest area of non-compliance.

Prioritizing Land Revitalization

In furthering EPA's priority goal of accelerating Superfund cleanups and returning sites to beneficial use, Region 7 committed itself in FY2019 to land cleanup and revitalization efforts to identify sites with redevelopment potential and to provide assistance to local communities, state partners, and other interested parties. As a result of this revitalization priority, Region 7 assessed 141 properties (exceeding the target of 110) and cleaned up 16 properties (beating the target of 3).

In addition, Region 7 achieved Site-Wide Ready for Anticipated Use at three sites on the NPL, returning more than 900 acres to beneficial use in those communities. Redevelopment potential was advanced in other parts of the four-state region through rapid response to 17 Prospective Purchaser Inquiries; timely transmittal of nine comfort letters to interested parties; issuance of one Bona Fide Prospective

Purchaser Doing Work Agreement; and preparation of redevelopment recommendations for four communities within a former mining site.

In FY2019, Region 7 also focused on information gathering and outreach related to Opportunity Zones in Iowa, Kansas, Missouri and Nebraska. The goal of this engagement was to determine how Region 7 can best assist these communities — particularly small and rural communities — overcome challenges they face in attracting investment in their Opportunity Zones. To accomplish this goal, Region 7 participated in Opportunity Zone workshops along with other federal and state agencies in Des Moines, Wichita, Kansas City and St. Louis. The region also met with state economic development agencies in all four states as well as local officials in 11 different Opportunity Zone communities. This work formed the basis for developing an Opportunity Zone work plan that will guide our efforts to assist Opportunity Zone communities in FY2020.

Strengthening Relationships with the Agricultural Sector

Recognizing the importance of agriculture to America's heartland, Region 7 identified four focus areas to develop a strong partnership with the agricultural sector in in FY2019 and beyond. First, Region 7 built trust with and provided regulatory certainty to anhydrous ammonia retail facilities by conducting chemical accident prevention compliance assistance workshops and mock inspections. We engaged and educated more than 100 industry representatives through this initiative, investing in the idea that chemical accident prevention, preparedness, and response is a shared partnership across all levels of government, industry, and the public.

In addition, Region 7 partnered with states and tribes to provide more than 80 informational outreach events to the public and agricultural stakeholders on how to identify, report, and prevent harmful algal blooms. This outreach priority was bolstered by Region 7's selection for an ORD Innovations project through which EPA will award a prize to a high school student who produces the best public service video about harmful algal blooms.

Finally, Region 7's fourth agricultural initiative was aimed at supporting and sharing information with agricultural stakeholders and municipalities to accelerate investment in water quality trading and other market-based conservation programs that reduce pollutants in our nation's waters. Upon release of a Memorandum of Understanding between EPA and USDA in January 2019, Region 7 worked in overdrive to present and discuss numeric nutrient trading at over 20 meetings and conferences throughout our four-state region. In each of these focused outreach areas, Region 7 strives to be an effective partner with the agricultural sector to ensure the EPA's delivery of cleaner air and water in our region.

Region 8

ADDRESSING EMERGING CONTAMINANTS IN DRINKING WATER

Region 8 focused on new efforts to address emerging contaminants in drinking water. Public water suppliers required to sample for unregulated contaminants may find their finished water has levels of contaminants that exceed health advisories but are unregulated under the Safe Drinking Water Act. To rectify this regulatory gap, our Drinking Water Program advised states on how to address these situations. Our advisory document proved critical when 12 water systems in our region identified levels of manganese in their water above health advisories. Using the information provided by Region 8, our state partners worked with the water systems to notify these communities, and in some cases determine that "Do Not Drink" orders were appropriate. Our guidance resulted in more than 17,000 people quickly receiving information that their water had manganese above health advisories.

BROWNFIELDS HIGHLIGHTS

In 2019, 120 Brownfields properties in Region 8 were made Ready for Anticipated Use (RAU), a 100 percent year-over-year increase compared to 2018. These projects leveraged $122 million in redevelopment investments and 906 local jobs. In one example in Lakewood, Colorado, a $200,000 EPA grant to address a chlorinated solvent plume leveraged $3.48 million in tax credits and low-income housing financing and paved the way for the development of 52 affordable housing units at the Fifty Eight Hundred complex.

The Region 8 Brownfields team also worked with tribal partners to remediate 14 contaminated sites in Indian country. In July 2019, the Turtle Mountain Band of Chippewa Indians used a $200,000 grant to cleanup asbestos-containing materials in three badly dilapidated buildings at the L'BelCour housing complex in Belcourt, N.D. The neighborhood consists of 18 structures, with many of the housing units occupied despite being in extremely poor condition and the widespread presence of asbestos. In partnership with EPA and HUD, the Tribe is moving forward with plans to systematically cleanup, demolish and replace all 18 structures while they also look to take advantage of the area's new status as a Qualified Opportunity Zone.

EAST HELENA SUPERFUND REDEVELOPMENT

The East Helena Smelter Site (ASARCO Lead Smelter) was listed on the National Priorities List in 1984 due to lead and arsenic contamination in the community's soils and arsenic in groundwater. In 2005, ASARCO filed for bankruptcy and in 2009 the Montana Environmental Trust Group was appointed as the Custodial Trustee to complete cleanup at the site. Over 2,000 acres of property and $96 million were transferred to the Trust. As a result of EPA's assistance with East Helena's planning and redevelopment efforts, the site now hosts the state-of-the art Lewis & Clark County Search and Rescue facility, the new Prickly Pear Elementary School, the future site of the new East Helena High School, and a 300-home subdivision. In addition, over 180 acres of the Prickly Pear Creek floodplain have been restored, the Prickly Pear Land Trust Greenway trail project will soon be a reality, and the U.S. Fish and Wildlife Service is working on a restoration plan for 80 acres of migratory bird habitat and native upland grasses. 240 acres of the site were recently sold for commercial/mixed use redevelopment. Collectively, these projects represent 700 acres redeveloped or transitioned for redevelopment. On August 22, 2019, EPA Region 8 presented the Environmental Achievement Award for Excellence in Site Reuse to the Montana Environmental Trust Group. Certificates of Appreciation were also awarded to the U.S. Fish and Wildlife Service, the Montana Department of Environmental Quality, the Montana Department of Justice Natural Resource Damage Program, the Lewis & Clark County Environmental Health Services Division, the City of East Helena, East Helena Public Schools and the Prickly Pear Land Trust.

PEDIATRIC ENVIRONMENTAL HEALTH SPECIALTY UNIT

EPA Region 8 provided funding to the R8 Pediatric Environmental Health Specialty Unit (PEHSU) to conduct outreach and education on reducing and preventing childhood lead exposure. The PEHSU disseminated materials to various partners such as state and local health departments and clinicians. The PEHSU also collaborated with Denver Health to develop a geo-mapping tool using 17,000 lead test results collected over the last three years. The maps concentrate on the Denver area, but will likely expand to cover other parts of Colorado. The PEHSU will present on this information at the Frontiers of Medicine Conference in Casper, Wyoming, and the Wyoming Medical Society's annual meeting in 2020. Additionally, the Region 8 PEHSU participated in three public health meetings and the National Association of School Nurses Conference to share important information on children's health, reaching approximately 2,400 people.

IMPROVING AIR QUALITY

Salt Lake City and Provo, Utah Achieve Attainment

On April 10, 2019, and September 27, 2019, EPA finalized approval of Clean Data Determinations for the Provo and Salt Lake City fine particulate ($PM_{2.5}$) nonattainment areas. These approvals mean the Wasatch Front in Utah has attained the 24-hour $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS) after exceeding the standard for the prior 13 years. The determinations were based on certified air monitoring data from the 2015-2017 (Provo) and 2016-2018 (Salt Lake City).

Prior to 2019, Region 8 worked with Utah to develop the Salt Lake City Serious $PM_{2.5}$ State Implementation Plan, which included: an attainment demonstration, contingency measures, reasonable further progress, motor vehicle emission budgets, best available control measures (BACM), best available control technologies (BACT) for sources within the nonattainment area. Additionally, Utah submitted BACM/BACT for the Provo Serious $PM_{2.5}$ nonattainment area. These measures, in addition to enhanced vehicle emissions testing programs and budgets and the state's wood-burning bans, contributed to the areas coming into attainment with the NAAQS. This major success story reflects the strong partnerships between EPA, the State of Utah, and local entities.

Region 9

State Implementation Plan Successes:

Region 9's Air & Radiation Division exceeded our goal of acting on 54 State Implementation Plans (SIP) submittals and took final action on 81 SIP submittals. To help reduce the number of old or un-approvable state implementation plans in the Region's backlog, we set a goal of achieving 14 SIP withdrawals, increasing the number of withdrawals from the prior year by 25 percent.

A key achievement in the region's air office was approving Portola, California's $PM_{2.5}$ attainment plan. Portola's innovative plan is based on a locally implemented voluntary woodstove change-out program in a small rural area where woodsmoke is the primary pollutant. The voluntary program was funded by an EPA targeted airshed grant and the attainment plan includes an enforceable local measure that will be triggered should emission reductions be less than expected.

Partnerships & Grants

Due to the air quality challenge of wildfires in the Western U.S., EPA Region 9 has formed a "Smoke Team" to handle the many challenges related to wildfire smoke response and prevention. This year the emphasis has been on smoke-event preparedness for the workforce and communities. Region 9 has engaged with states, tribes, local cities, and regional and national associations to provide expertise and tools in order to support smoke-event preparedness in communities. External partners have been especially interested in EPA's Smoke-Ready Toolbox along with our expertise in Air Quality Index, sensor deployment, and communication strategies

ENVIRONMENTAL PROTECTION AT THE SOUTHWEST U.S. MEXICO BORDER:

Region 9 convened 15 stakeholder meetings in 2019 along the Arizona and California border. These meetings served to update federal, state, and local elected officials and organizations on options to control transboundary sewage flows in the Tijuana area.

EPA funded and worked closely with North American Development Bank to produce a feasibility analysis of high priority infrastructure options in the U.S. and Mexico to stem transboundary sewage flows. The NADB report, issued in August 2019, is facilitating interagency discussions intended to yield consensus agreement on infrastructure priorities.

The EPA joined with International Boundary and Water Commission (IBWC) and the State of Arizona to identify integrated solutions to ongoing transboundary pollution issues in Nogales, Sonora and AZ, including infrastructure funding strategies.

In partnership with OITA, Region 9 laid the foundation for a new border agreement at the International Border 2020 meeting in Mexico City. The participating parties agreed to a 5-year plan as opposed to the traditional 10-year plan.

PACIFIC ISLAND TERRITORIES:
EPA staff have improved the grant processes for Pacific Island water treatment and solid waste infrastructure and maintenance. Region 9 awarded $30 million in FY19 to the Pacific Island Territories for water and wastewater infrastructure projects. In addition, Guam initiated construction of a major upgrade to the Northern District Wastewater Treatment Plant, as part of a $174 million partnership with EPA and Guam that the U.S. Department of Defense is funding to upgrade civilian wastewater facilities impacted by the military.

Region 10
Restoring Drinking Water System for 3,000 people in Central Oregon Tribal Community:
Region 10's enforcement program used Safe Drinking Water Act emergency orders in response to significant public water system distribution failures in several tribal communities across the region. These orders have spurred action to help restore the systems and provide safe water to these communities.

One of the systems requiring immediate action was on the Confederated Tribes of Warm Springs reservation. Long-standing problems at the aging public water system serving over 3,000 people resulted in total system failure and water "outages" which required providing bottled water for several weeks to businesses, residences and other public services. The lack of drinking water also forced the closure of the early education center. EPA is helping bring together other federal agencies and other possible funding sources to assist the tribe in their long-term infrastructure planning and financing as they work to comply with the Safe Drinking Water Act and Region 10's order.

Region 10's National Estuary Program Efforts Help Protect and Restore Some of Our Most Treasured Water Bodies:

Puget Sound: EPA Region 10 approved the updated Comprehensive Conservation Management Plan for Puget Sound and provided over $28 million in grant funds to state, local, tribal, and federal partners towards Puget Sound recovery and conservation efforts through its National Estuary Program. Thanks to funding from EPA's Puget Sound National Estuary Program through Washington Department of Health that provided program and project funding to local partners in Whatcom County and through funding provided to the Lummi Indian Nation to support collaborative efforts to open up 800 acres for shellfish harvest in Portage Bay. These important harvest for the Lummi Nation have been closed for many years.

Highlights include:

- The protection and restoration of an additional 2,474 acres of key Orca and salmon habitat.
- Funding of seminal stormwater toxicology applied research to reduce toxics in fish and to benefit Orca recovery.

- Re-connection of many dozens of miles of stream to support fish passage to and from spawning and rearing habitats largely through the removal of culverts.
- Development of sophisticated computer models on the impact of nutrients on Puget Sound water quality.

Tillamook National Estuary Program:
EPA fully approved a new Comprehensive Conservation Management Plan for the Tillamook Estuary Partnership that expanded their geographic scope to new adjoining coastal estuaries/watersheds and further refined that strategic recovery planning, monitoring and stewardship efforts.

Columbia River Basin Restoration Program:
EPA designed and implemented a new program called for in the 2016 Columbia River Basin Restoration Act and in FY19 received $1 million in appropriations for the first time. After many years of visioning, discussion, strategizing, and legislative action, EPA was charged with the responsibility of standing up a grants program to address toxic pollution in the Columbia River Basin. EPA Region 10 has developed a program plan, invited members to the working group and released the Request for Applications and will be awarding our first grants under the program in early FY 2020.

North Idaho Community Reduces Attains Air Quality Standards:
Pinehurst Idaho, a northern Idaho mountain valley community, and the adjacent Pinehurst expansion area have come into attainment for national ambient air quality standards for PM-10 after more than 30 years of nonattainment status. Coming into attainment is the culmination of close nearly 30 years of work by the community, the State of Idaho and EPA to reduce PM-10 emissions from woodburning devices, the primary contributor of elevated PM-10 in the area.